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Query
Match
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(c) 1993 - 2006 Biocceleration
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AAW81468
ABW1766
ABR42769
ADK82701
ADI35870
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ADI73486
AAW81469
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AAW39756
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ADR12778
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Abr42769
Adk82701
Adi35870
Adz59196
Adp73486
Aaw81469
Aau93990
Ade10851
Aau11776
Aau11771
Abr42779
Abr42774
Adp73823
Aar60362
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Adq37254
Aaw81471
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Human amy
Human amy
                                                        Abeta pep
Vaccine a
Synthetic
Synthetic
Synthetic
                                                                                                                                   Beta-amyl
Amyloid b
Human amy
Alzheimer
Synthetic
Human bet
Chimeric
B-cell pe
Recombina
Alzheimer
Human bet
Loop inse
Beta-amyl
                              Amyloid b
Amyloid b
   AAW519899
AAW80186
AAAE26332
AAW518163
AAW518163
ABU08710
ABU08508
ABP019185
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ABP019186
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ABP96148
ADY81763
AAR33191
AAR633191
AAR633191
AAR623335
AAW23335
AAW47226
AAY14099
AAY14099
AAY25135
AAW37503
AAW375135
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AAB918133
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ADY81762
AAR60363
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AAG68313
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AAU11773
                 Abo 1985
Abp 1626
Abp 1783
Abp 1783
Abp 1776
Abo 1776
Abu 1776
Abu 1776
Abu 1776
Abu 1776
Adb 1563
Ada 1518
Adc 1518
Adc
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Aay92733
Aab927233
Aab92723
Aab91813
Aab91802
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Aab9482
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Aau99425
Aau11772
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Aar60363
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Aar33191
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Amyloid b
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Human A)
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Human A of
Beta-amyl
Anyloid A
A40, SEQ
Amino aci
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Amino aci
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Human amy
Vaccine amy
Vaccine amy
Human in amy
Novel glu
Amyloid-b
Novel glu
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Anzheimer
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Amyloid b
Amyloid b
Human bet
Beta-amyl
Synthetic
Human amy
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RESULT 1
AAW81468
ID AAW9
XX AW9
XX AW9
XX Synt
XX Y
XX Aw9
XX Synt
XX Cas
RESULT 2
AAU11766
ID AAU1
XX
AC AAU1
XX
DT 26-M
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Matches 30
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99
100
                                                                                                                                                                                                                                                                                                                                                                                        Sequences AAW81466 to AAW81476 represent synthetic amyloid beta (Abeta) peptides. The invention provides a process for treating a synthetic Abeta peptide in that comprises dissolving the peptide in a deoxygenated solvent selected from trifluoroethanol, hexafluorocyclohexane, dimethyl sulphoxide, morpholinopropanesulphonic acid, dimethylformamide and acetonitrile to a concentration of 0.01-10 mg/ml, incubating the solution at 20-65 deg. C for 0.5-4 hour, and removing the solvent by 'evaporative deposition' in 5-10 minutes. Synthetic amyloid beta peptides are useful as research tools for studying neurotoxicity resulting from Abeta peptide of the synthetic Abeta peptides in tests to determine free-radical production. The treatment increases the activity generating capacity and glutamine synthetase inactivation
  26-MAR-2002
                                                                                 AAU11766 standard;
                                                                                                                                                                                                                                                                                                                                                        Sequence 30 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Process for treating synthetic amyloid beta peptides - treatment, useful for studying neurotoxicity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-034120/03.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic amyloid beta (Abeta) peptide 3 (residues 1-30).
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                                            AAU11766;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-FEB-1996;
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162
162
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1 Similarity 100.0%; 1
30; Conservative 0;
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                                                                                 protein;
    entry)
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ADY81764
ADY78385
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Pred. No. 5.5e-18;
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Ady81764
Ady78385
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Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta. The peptide may be conjugated to polymer molecule. Antibodies raised against the peptides are also included. The peptide is useful for inducing an immune response to amyloid beta peptides and amyloid deposits and therefore treating Alzheimer's disease. The antibody is useful for reducing the formation of amyloid fibrils and deposits. The peptide has a reduced ability to adopt a beta-sheet confirmation as an antigenic source, and a much lower risk of leading to any toxic effects in humans. The present sequence is a human amyloid beta 1-42, residues 1-30 which is used as a basis for the peptides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta, useful for inducing immune response to amyloid beta peptides and amyloid deposits.
                                                                                                       Key
Region
                                                                                                                                                                                                         Human; amyloid beta; amyloidosis; Alzheimer's disease; neuroprotective; immunogen; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amyloid beta; non-amyloidogenic peptide; vaccine; immunogen; Alzheimer's disease; amyloid fibril; human.
                                                                Region
                                                                                                                                                                                                                                                                          Human amyloid beta(1-42) amino acid residues 1-30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-106186/14.
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    WO2003045128-A2
                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                   08-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                  standard; peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 162; Ilarity 100.0%; Pred. No. 5.:
Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                   (first entry)
                                            /note= "major immunogenic site of amyloid beta"
22. . 28
/note= "major immunogenic site of amyloid beta"
                                                                                                                           Location/Qualifiers
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.5e-18;
s 0;
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RESULT 4
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IID ADK8
XX ADK8
XX ADK8
XX Beta
XX Beta
XX Inmu
COS Home
CX CN11
XX CN12
XX Inmu
CN1 13-0
XX Inmu
XX Home
X
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Matches
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Human fusion antibody for reducing cerebral amyloid fibers associated
                                                                                                                                                                                                                                                                                              13-JUL-2001; 2001CN-00120278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beta-amyloid peptide #7 recognised by antibody to treat senile dementia.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADK82701 standard; peptide; 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to amyloid beta peptides, and immunizing compositions comprising the peptides are used in a claimed method of reducing amyloidosis. Antibudirected against the peptides can be used in passive immunization
                                                         WPI; 2003-442233/42.
                                                                                                                                                                                                                                                                                                                                                     12-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                              CN1396183-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New synthetic immunogenic but non-deposit forming peptides, useful inducing an immune response to prions, amyloids, amylin or amylin fibrils, particularly for treating e.g. Alzheimer's, scrapie or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-NOV-2001; 2001US-0331801P
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                                                                                                                                                                                                                                    13-JUL-2001; 2001CN-00120278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          fusion antibody;
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                                                                                                                                                                                (ZHAN/) ZHANG X.
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                                                                                                                Zhang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          senile dementia; beta-amyloid peptide; fibre;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 162; DB 6;
Pred. No. 5.5e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sigurdsson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Best Local
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                                                                                                                                                                                                                                                                                                                                         New amyloid beta peptide, useful for preparing a composition preventing the formation or progression of amyloid plaques for treating Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                treating senile dementia. The antibody recognises and binds the beta-
amyloid peptide and the fibre generated by it. The human antibody Fc
segment recognized by human immunocells are sequentially contained by it.
terminals from N to C. The fusion gene coding for the antibody is also
disclosed. This sequence represents a beta-amyloid peptide recognised by
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                                                                                                                                                                                                                                                                                                      Example 2; SEQ ID NO 24; 69pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amyloid beta peptide; vaccine; immunisation; neuroprotective;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a human fusion antibody for preventing treating senile dementia. The antibody recognises and binds the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Page 2; 26pp; Chinese.
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Pred. No. 5.5e-18;
; Mismatches 0;
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beta-
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The invention relates to an amino acid composition (I), with improved CC blood brain barrier permeability, comprising a chemically synthesized camino acid polymer comprising at least one asparagy1-4-aminobutane or glutamy1-4-aminobutane residue. Also described: (I) creating an amino acid polymer with improved blood brain barrier permeability comprising CC chemically synthesizing an amino acid polymer (where at least one asparagy1-4-aminobutane or glutamy1-4-aminobutane residue is incorporated contribution of the process of the synthesizing an amino acid polymer (where at least one superagy1-4-aminobutane or glutamy1-4-aminobutane residue is incorporated contribution of alpha-Fmoc-L-asparty1-alpha-(4-aminobuty1)-carbamic acid contributylester or N-alpha-Fmoc-L-glutamy1-delta-(4-aminobuty1) carbamic acid cert-butylester or N-alpha-Fmoc-L-glutamy1-delta-(4-aminobuty1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amino acid composition, useful in molecular imaging, comprises chemically synthesized amino acid polymer comprising at least asparagyl-4-aminobutane or glutamyl-4-aminobutane residue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example; SEQ ID NO 5; 24pp; English.
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(CURR/)
(WENG/)
(MCCO/)
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CURRAN G L.
WENGENACK T M
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larity 100.0%;
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Pred. No. 5.5e-18;
Mismatches 0;
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                                                 The invention relates to a novel recombinant chimeric Hepatitis B virus concleocaspid (core) protein (HBC), up to 600 or 380 amino acid residues in length. The chimeric protein is engineered for both enhanced stability of self-assembled particles and the substantial absence of nucleic acid conding by the particles. The invention further comprises: a recombinant HBC protein chimeric molecule that has a length of 135-365 amino acid cresidues and contains four peptide-linked amino acid residue sequence domains from the N-terminus that are denominated Domains I, I, II and IV. The invention also provides nucleic acids, polypeptides, host cells, vectors and transgenic animals used in the methods of the invention. The chimeric compositions of the invention have hepatotropic and virucide activities. The methods and compositions of the present invention are useful in the fields of immunology and protein engineering, in particular for using a chimeric hepatitis B virus nucleocapsid protein as an immunogen in a vaccine for Hepatitis B infections. This sequence composents a Hepatitis B virus nucleocapsid protein related complements and the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New recombinant chimer hepatitis B core (HBC) protein molecules the fields of immunology and protein englineering, in particular immunogen in a vaccine for Hepatitis B infections.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 99; 338pp; English.
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Mismatches
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5.5e-18;
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Query Match Best Local S Matches 30

Similarity

100.0%; Score 162; DB 8 llarity 100.0%; Pred. No. 6e-18; Conservative 0; Mismatches

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                                                                                                                                                                                                                                                                                                                                Sequences AAW81466 to AAW81476 represent synthetic amyloid beta (Abeta) peptides. The invention provides a process for treating a synthatic Abeta peptide in that comprises dissolving the peptide in a deoxygenated solvent selected from trifluoroethanol, hexafluorocyclohexane, dimethyl sulphoxide, morpholinopropanesulphonic acid, dimethylformamide and acetonitrile to a concentration of 0.01-10 mg/ml, incubating the solution at 20-65 deg. C for 0.5-4 hour, and removing the solvent by 'evaporative deposition' in 5-10 minutes. Synthetic amyloid beta peptides are useful as research tools for studying neurotoxicity resulting from Abeta peptide enhanced free-radical production. The treatment increases the activity of the synthetic Abeta peptides in tests to determine free-radical
                                                                                                                                                                                                                                                                                          Sequence 33 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treatment, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Process for treating synthetic amyloid beta peptides -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-034120/03.
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             Human beta-amyloid B cell epitope #4.
                                           02-JUL-2002
                                                                                                                                                                                                                                                                                                                     generating capacity and glutamine synthetase inactivation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amyloid beta; Abeta; deoxygenated solvent; evaporative deposition; research; neurotoxicity; free-radical; glutamine synthetase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic amyloid beta (Abeta) peptide 4 (residues 1-33).
                                                                                                   AAU93990 standard; peptide; 33
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                                                                                                                                                                                                                                                ocal Similarity
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                                          (first entry)
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                                                                                                                                                                                                                                Score 162; DB 2;
Pred. No. 6.2e-18;
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BXAXAXB

29-JAN-2004 ADE10851;

(first entry)

Chimeric hepatitis B virus related B-cell epitope seqid 85.

片 8

Matches

Similarity

Conservative

Indels

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Gaps

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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA

30

RESULT 10

ADE10851 standard;

peptide;

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The invention relates to a recombinant hepadnavirus nucleocapsid protein, CC i.e. a chimeric hepatitis B core (HBC) protein (I), displaying one or CC more immunogenic epitopes at the N-terminus, HBC immunogenic loop (L) or CC C-terminus or having a heterologous linker for a conjugated epitope in CC (L), and containing a Cys residue at, or near, the C-terminus that CC confers enhanced stability to the particles. A vaccine comprising (I) is CC useful for inducing an immune response in an inoculated host animal, by CC inoculating a host animal with the vaccine, and maintaining that CC inoculated animal for a time period sufficient for that animal to develop CC an immune response. The immunogenic particles formed using (I) are CC terminal residue or in which a C-terminal Cys is replaced by another CC terminal residue or in which a C-terminal Cys is replaced by another CC terminal Cys residues. The chimer particles are most stable on storage in aqueous CC compositions that are particles of similar sequence that lack any C-CC terminal Cys residues. The chimer molecule exhibits the self-assembly not CC terminal Cys residues. The chimer molecule exhibits the self-assembly not CC terminal Cys. The particles are free CC terminal Cys. The particles are free CC exhibiting the nucleic acid binding of those native particles are CC terminal Cys. The particles are free CC similar particles assembled from the chimer molecules are conjugates that lack a C-terminal Cys. Immunogenic than CC terminal Cys. Aluganga, Alugan
                                                        Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-AUG-2000;
22-AUG-2000;
                                                                                                                                                                                                        Sequence 33
                                                                                                                                                                                                                                                                                          similar particles assembled from chimer molecules lacking at least one terminal Cys. AAU93802-AAU93997 represent immunogenic HBc particles amacid sequences and related sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 38;
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2000US-0226867P.
2001US-00930915.
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Score 162; DB 5;
Pred. No. 6.2e-18;
                                                                                                 Length 33;
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ARESULT 11
ADM39756
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Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes a method of treating chronic hepatitis comprising administering to a patient a T cell-stimulating amount of a vaccine comprising immunogenic particles dissolved or dispersed in a diluent, where the immunogenic particles consists of recombinant hepatitis B core (HBC) chimeric protein molecules, and maintaining the patient to induce T cells activated against HBC. The methods and compositions of the present the amino acid sequence of a chimeric hepatitis B infection. This is epitope useful for treating chromic hepatitis B virus related B-cell epitope useful for expression within the HBV chimer at the N-terminus, within the immunoigenic loop and/or at the C-terminus.
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                                                                                                                                                                                                                                           immunogenic; avian hepatitis B virus; nucleocapsid; self assembled particle; inmunogen; inoculum; vacci antibacterial; virucidal; B-cell epitope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating chronic hepatitis B infection by administering a T cell-
stimulating vaccine containing immunogenic particles having recombinant
carboxy-terminal truncated hepatitis B core (HBC) chimeric protein
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       21-FEB-2003; 2003WO-US005315
                                                                   04-SEP-2003.
                                                                                                                             WO2003072722-A2
                                                                                                                                                                                                                                                                                                                                                                 B-cell peptide epitope expressed by HBc chimer Seq 88
                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADM39756 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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(FRIE/) FRIEDE M.
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Similarity 100.0%;
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Pred. No. 6.2e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                               vaccine;
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                                                                                                                                                                                                                                                                               immunostimulant;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC hepatitis B core (AHBc) nucleocapsid proteins. Specifically, it refers to CC an AHBc protein that has been engineered to display an immunogenic B cell CC or T cell epitope, exhibit enhanced stability and an absence of nucleic CC acid binding as a self assembled particle. The present invention CC describes the chimeric AHBc protein as truncated at the C-terminus and CC containing introduced cysteine residues that confers an enhanced CC stability in aqueous solution, an increased yield and more immunogenicity CC than similar conjugates that lack N - or C-terminal cysteines.

CC (lysine and arginine) towards the C-terminal prepares self-assembled CC particles that are substantially free of nucleic cold binding. As such, CC these chimeric particles can be used as immunogens of an inoculum that CC induce a B cell or T cell response in an animal to produce antibodies. It CC an also be useful for developing a vaccine to protect against the CR accordingly, these compositions exhibit immunostimulant, antibacterial CC and virucidal activities. This peptide sequence is an exemplary B-cell CC epitope peptide immunogen useful for both linkage to the linker residue CC after expression of a contemplated chimer and for expression within an CC HBC chimer of the invention.
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Matches
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an immunogen for inducing a B cell or T cell response
antibodies, or as a vaccine against pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant chimer hepatitis B core protein; HBc; HBc immunodominant loop; immune response.
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                                                                                                 15-AUG-2001; 2001US-00930915
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                                                                                                                                                                                                                                                                                                                                                           Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Recombinant chimer hepatitis B core protein immunogenic epitope #76.
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                                     (BIRK/) BIRKETT
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Pred. No. 6.2e-18;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        immunogenic epitope;
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to produce
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                            New recombinant chimer hepatitis B core (HBc) protein molecules useful the fields of immunology and protein engineering, in particular as an immunogen in a vaccine for Hepatitis B infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      transgenic animal; I enhanced stability;
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                                                                                                                                                                                                                                                                                                                                              10-DEC-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            protein
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cing an immune response in an inoculated host animal. This sequenc
esents an HBc protein immunogenic B cell epitope of the invention.
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Pred. No. 6.2e-18;
D; Mismatches 0;
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21-FEB-2002;
21-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           binding by the particles. The invention further comprises: a recombinant HBC protein chimeric molecule that has a length of 135-365 amino acid residues and contains four peptide-linked amino acid residue sequence domains from the N-terminus that are denominated Domains I, II, III and IV. The invention also provides nucleic acids, polypeptides, host cells, vectors and transgenic animals used in the methods of the invention. The chimeric compositions of the invention have hepatotropic and virucide activities. The methods and compositions of the present invention are useful in the fields of immunology and protein engineering, in particular for using a chimeric hepatitis B virus nucleocapsid protein as an immunogen in a vaccine for Hepatitis B virus nucleocapsid protein related polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                         Human; chronic hepatitis; HBc; nucleocapsid core protein; vaccine; immunogen; immunogenic epitope; T cell; B cell; CD8+ cell; CD4+ cel cytotoxic T lymphocyte; toll-like receptor 4; toll-like receptor 9;
                                       Treating chronic hepatitis, by administering vaccine comprising immunogenic particles having recombinant hepatitis B core chimeric protein molecules, that stimulates T cell, to patient chronically
                                                                                                                                                                                                                                                                                         01-OCT-2003; 2003US-00677074.
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                                                                                                                           Page M,
                                                                                                                                                                                                                                                                                                                       12-AUG-2004.
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                                                                                                                            Friede M,
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2002US-00082014.
2003US-00372076.
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Pred. No. 6.2e-18;
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Disclosure; SEQ ID NO 85; 117pp; English

infected with hepatitis B virus.

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The present sequence was used in the development of a novel in vitro screening assay for agents capable of affecting the deposition of beta-amyloid peptide (BAP) on tissue. The method comprises contacting a silk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Screening as
Alzheimer's
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                                                                                                                                                  Claim
                                                                                                                                                                                                                                                                                                                             WPI; 1998-168404/15.
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                                                                                                                                                                                                                 vitro screening assay for Alzheimer's disease drugs - comprises ing binding of labelled beta-amyloid peptide to silk sample.
                                                                                                                                                                                                                                                                                                                                                                                                PW,
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HARVARD COLLEGE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    assay; beta-amyloid peptide; treatment; amyloidosis disease;
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llarity 100.0%;
Conservative
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                                                                                                                                          31-32; 36pp; English.
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Pred. No. 6.2e-18;
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The invention relates to a method for prevention and/or treatment of an amyloid-related disease which comprises administration of an all-D-amyloid-beta peptide. The method is used for preventing and/or treating Alzheimer's and other amyloid related disease e.g. cerebral amyloid angiopathy; for altering serum levels of amyloid-beta in a mammal and favours the clearance of soluble amyloid-beta or fibril amyloid-beta for the mammal; and reducing or inhibiting the formation of plaques. It is also used for treating AA (reactive) amyloid disease including inflammatory diseases e.g. rheumatoid arthritis, juvenile chronic arthritis, ankylosing spondylitis, psoriasis, psoriatic arthropathy, Reiter's syndrome, Adult Still's disease, Bechet's syndrome and Crohn's disease. AA deposits are also produced as a result of chronic microbial infections (preferably leprosy, tuberculosis, bronchiectasis, decubitus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                All-D-amyloid-beta peptide; Alzheimer's disease; rheumatoid arthritis; cerebral amyloid angiopathy; amyloid disease; ankylosing spondylitis; psoriasis; Reiter's syndrome; Adult Still's disease; Bechet's syndrome; Crohn's disease; infection; leprosy; tuberculosis; carcinoma; nootropic; chronic pyelonephritis; osteomyelitis; Whipple's disease; vasotropic; Hodgkin's lymphoma; neuroprotective; bronchiectasis; ophthalmological; ulcer; antiinflammatory; cytostatic; uropathic; therapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Prevention and/or treatment of Alzheimer's disease, comprises
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100.0%; Pred. No. 6.
tive 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            an amyloid-related disease e.g. use of all-D-amyloid-beta peptides
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Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neuroprotective; cerebroprotective; haemostatic; ophthalmological; antithyroid; vasotropic; cardiovascular; tranquilliser; uropathic; anticonvulsant; anti-HIV; antiparkinsonian; muscular; neuroleptic; cardiant; antidepressant; endocrine; hyportic; amyloid-beta fibril formation modulator; humune system modulator; amyloid-beta cognitive impairment; vascular dementia; mild-to-moderate cognitive impairment; vascular dementia; cerebral amyloid angiopathy; hereditary cerebral haemorrhage; senile dementia; bown's syndrome; inclusion body myositis; age-related macular degeneration; hypothyroidism; cerebrovascular disease; cardiovascular disease; memory loss; anxiety; behavioural dysfunction; neurological condition; psychological condition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ulcers, chronic pyelonephritis, osteomyelitis and Whipple's disease). Certain malignant neoplasms can also result in AA fibril amyloid deposits including Hodgkin's lymphoma, renal carcinoma, carcinomas of gut, lung and urogenital tract, basal cell carcinoma and hairy cell leukaemia. The present sequence is an Abeta peptide used to illustrate the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amyloid-beta; amyloid-beta related disease;
amyloid-beta fibril formation; immune response; nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vaccine antigen amyloid-beta related amino acid sequence
The present invention describes compositions (C) comprising: (a) agent (a1) that prevents or treats amyloid-beta related disease;
                                                                             Composition for treating e.g. Alzheimer's disease comprises first agent that prevents or treats amyloid-beta related disease and second agent that is either a peptide or peptidomimetic or an immune system modulato:
                                                                                                                                                                                                                                               24-DEC-2002;
23-JUN-2003;
                                                                                                                                                                                                                                                                                                                            15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADQ37254 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 35 AA;
                                                  Disclosure;
                                                                                                                                                  WPI; 2004-543342/52.
                                                                                                                                                                                                                (NEUR-) NEUROCHEM INT LTD
                                                                                                                                                                                                                                                                                               24-DEC-2003;
                                                                                                                                                                                                                                                                                                                                                              WO2004058239-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
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ilarity 100.0%;
Conservative (
                                                                                                                                                                                Bellini F;
                                                                                                                                                                                                                                               2002US-0436379P.
2003US-0482214P.
                                                                                                                                                                                                                                                                                               2003WO-CA002021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       amyloid-beta related disease;
                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
1. .35
                                                                                                                                                                                                                                                                                                                                                                                              /note= "D-form residues"
                                                  67;
                                                  143pp;
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                                                  English
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Pred. No. 6.7e-18;
); Mismatches 0;
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                                                                                  modulator
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CC nootropic, neuroprotective, carebroprotective, haemostatic, cophthalmological, antithyroid, vasotropic, cardiovascular, tranquilliser, cophthalmological, antithyroid, vasotropic, cardiovascular, tranquilliser, compathic, anticopvulsant, antiparkinsonian, muscular, tranquilliser, compathic, cardiant, antidepressant, endocrine and hypnotic activities, and can be used as amyloid-beta fibril formation modulators, and as cimmune system modulators. (C) can be used for preventing or treating an amyloid-beta related disease e.g. Alzheimer's disease (including sporadic comploid-beta related disease e.g. Alzheimer's disease (including sporadic comploid-beta related disease e.g. Alzheimer's disease (including sporadic comploid-beta related cognitive impairment, vascular dementia, cerebral comploid angiopathy, hereditary) wascular dementia, cerebral comploid angiopathy, hereditary cerebral haemorrhage, senile dementia, cerebral comploid angiopathy, hereditary cerebral pressure distinction (e.g. apathy, cerebral comploid deficits, incoordination, selectore, selectore, sensory loss, visual cerebral actions, cerebral selectore, selectore, sensory loss, visual cerebral comploid precursor protein gene, an apos anticomploid precursor protein gene, an apos gene, or a psychosis, suicidal cideation, depressed mood, irritability, anhedonia, social withdrawal, or cerebral comploid precursor protein gene, an apos gene, or a psychological comploid precursor protein gene, an apos gene, or a psychological comploid precursor protein gene, cerebral cerebral comploid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                    US5840838-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic amyloid beta (Abeta) peptide 6 (residues 1-36).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW81471 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 35 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modulates amyloid-beta tibril formation or induces a prophylactic or therapeutic immune response against amyloid-beta fibril formation, or (ii) an immune system modulator that prevents or inhibits amyloid-beta fibril formation also documents to the property of the prope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a second agent (a2) that is: (i) a peptide or peptidomimetic that modulates amyloid-beta fibril formation or induces a prophylactic
                                    (KENT ) UNIV
                                                                                                   29-FEB-1996;
                                                                                                                                                                         29-FEB-1996;
                                                                                                                                                                                                                                                  24-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Amyloid beta; Abeta; deoxygenated solvent; evaporative deposition; research; neurotoxicity; free-radical; glutamine synthetase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fibril formation. Also described is a kit comprising (C).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30;
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                                    KENTUCKY RES FOUND
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                                                                                                      96US-00609090.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 35;
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Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequences AAW81466 to AAW81476 represent synthetic amyloid beta (Abeta) peptides. The invention provides a process for treating a synthetic Abeta peptide. That comprises dissolving the peptide in a decaygemated solvent selected from trifluoroethanol, hexafluorocyclohexane, dimethyl sulphoxide, morpholinopropanesulphonic acid, dimethylformamide and acetonitrile to a concentration of 0.01-10 mg/ml, incubating the solution at 20-65 deg. C for 0.5-4 hour, and removing the solvent by "evaporative deposition" in 5-10 minutes. Synthetic amyloid beta peptides are useful as research tools for studying neurotoxicity resulting from Abeta peptide enhanced free-radical production. The treatment increases the activity of the synthetic Abeta peptides in tests to determine free-radical
The invention relates to an isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta. The peptide may be conjugated to polymer molecule. Antibodies raised against the peptides are also included. The peptide is useful for inducing an immune responser
                                                                                                                                                                                                                                                                                                                                                                             Amyloid beta; non-amyloidogenic peptide; vaccine; immunogen; Alzheimer's disease; amyloid fibril; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-034120/03.
                                                                                                                                                  WPI; 2002-106186/14.
                                                                                                                                                                                                                                22-MAY-2000;
                                                                                                                                                                                                                                                         22-MAY-2001; 2001WO-US016322
                                                                                                                                                                                                                                                                                    29-NOV-2001.
                                                                                                                                                                                                                                                                                                               WO200190182-A2.
                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic immunogenic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAU11776 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 36
                                                                                         isolated synthetic immunogenic but non-amyloidogenic peptide ogous to amyloid beta, useful for inducing immune response to id beta peptides and amyloid deposits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Col 11-12; 14pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; 9
1 Similarity 100.0%; 1
30; Conservative 0;
                                                                                                                                                                                                      UNIV NEW YORK STATE.
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nt, useful for studying
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                                                                  68;
                                                                                                                                                                        Wisniewski T,
                                                               ; dd69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein;
                                                                                                                                                                                                                                                                                                                                                                                                                     non-amyloidogenic peptide #10.
                                                                 English.
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                                                                                                                                                                           Sigurdsson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 162; DB 2;
Pred. No. 6.9e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amyloid beta preurotoxicity.
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RESULT 20
AAUI1771
AID AAUI1
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AC AAUI1
DT 26-MA
XX Synth
XX Amylo
XM WPI;
XM WPI;
XM WPI;
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XM WPI;
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                                                                                                                           The invention relates to an isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta. The peptide may be conjugated to polymer molecule. Antibodies raised against the peptides are also included. The peptide is useful for inducing an immune response to amyloid beta peptides and amyloid deposits and therefore treating Alzheimer's disease. The antibody is useful for reducing the formation of amyloid fibrils and deposits. The peptide has a reduced ability to adopt a beta-sheet confirmation as an antigenic source, and a much lower risk of leading to any toxic effects in humans. The present sequence is a synthetic immunogenic but non-amyloidogenic peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta, useful for inducing immune response to amyloid beta peptides and amyloid deposits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Synthetic.
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                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amyloid beta; non-amyloidogenic peptide; vaccine; immunogen; Alzheimer's disease; amyloid fibril; human.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 65; 69pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-106186/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Frangione B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAY-2000; 2000US-0205578P
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30; Conservative
                                                                                 36 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wisniewski T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
36
/note= "Optionally
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100.
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Pred. No. 6.9e-1
; Mismatches
Score
Pred.
162; DB 5;
No. 6.9e-18;
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                         Length
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Similarity

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RESULT 21
ABR42779
ID ABR42779
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XX Amylc
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RESULT 22
ABR42774
ID ABR42
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DT 08-SE
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is that of a polypeptide, denoted Abeta1-30-K6, comprising amino acid residues 1-30 of amyloid beta(1-42) protein (see also ABR42769) with a C-terminal poly-tys region. The novel polypeptide was shown to be slightly fibrillogenic in vitro but was non-toxic in human neuronal culture. It is an example of amyloid beta homologous polypeptides of the invention that can be used to induce an immune response to amyloid beta peptides for use in reducing amyloidosis. The use of non-fibrillar/non-toxic amyloid beta polypeptides is a safer
                     08-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New synthetic immunogenic but non-deposit forming peptides, useful inducing an immune response to prions, amyloids, amylin or amylin fibrils, particularly for treating e.g. Alzheimer's, scrapie or Creutzfeldt-Jacob disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amyloid beta; amyloidosis; Alzheimer's disease; neuroprotective; immunogen; vaccine; human; muta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABR42779;
                                                                                            ABR42774
                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                       vaccination approach for humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003045128-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABR42779 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Frangione B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-NOV-2001; 2001US-0331801P
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                                                                                                                                                                                                                                                                                                                                        36 AA;
                                                                                            standard;
                                                                                                                                                                                         DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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                                                                                          protein;
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                     entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sigurdsson EM;
                                                                                                                                                                                                                                                                                Score 162; DB 6;
Pred. No. 6.9e-18;
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                                                                                                                                                                                                                      RESULT 23
ADP73823
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                             Matches
                 transgenic animal; Hepatitis B virus nucleocaspid core protein; HBc; enhanced stability; hepatotropic; virucide; immunology; protein engineering; immunogen; vaccine; Hepatitis B infection.
                                                                                          door
                                                                                                                                 09-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 36
                                                                                                                                                                      ADP73823;
                                                                                                                                                                                                       ADP73823 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-505145/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Frangione B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-2001;
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Modified-site
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                                                                                                                               (first entry)
                                                                                          vector plasmid
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36

verification primer

peptide,

SEQ

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The present sequence is that of a novel immunogenic but non-deposit forming polypeptide derived from amino acid residues 1-30 of amyloid beta(1-42) protein (see also ABR42769). The novel polypeptide, denoted K6Abeta1-30.NH2, maintains the 2 major immunogenic sites of amyloid beta peptides, and is amidated at the C-terminus to further preserve antigenicity. Immunization of transgenic APP mice (7g2576) for 7 months with this non-amyoidogenic non-toxic amyloid beta homologous peptide reduced cortical and hippocampal brain amyloid burden by 89% and 81%, respectively, and brain levels of soluble amyloid beta(1-42) were reduced by 57%. K6Abeta1-30-NH2 is an example of amyloid beta homologous polypeptides of the invention that can be used to induce an immune response to amyloid beta peptides for use in reducing amyloidosis. The use of non-fibrillar/non-toxic amyloid beta polypeptides is a safer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New synthetic immunogenic but non-deposit forming peptides, useful for inducing an immune response to prions, amyloids, amylin or amylin fibrils, particularly for treating e.g. Alzheimer's, scrapie or Creutzfeldt-Jacob disease.
                                                                                                                                                                                                                                                         vaccination approach for humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 214; 265pp; English.
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEW YORK STATE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amyloidosis; Alzheimer's disease; nootropic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "C-terminal amide"
                                                                                              100.0%;
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                                                                                                 Score 162; DB 6;
Pred. No. 6.9e-18;
                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a novel recombinant chimeric Hepatitis B virus can uncleocaspid (core) protein (HEC), up to 600 or 380 amino acid residues in length. The chimeric protein is engineered for both enhanced stability of self-assembled particles and the substantial absence of nucleic acid binding by the particles. The invention further comprises: a recombinant HBC protein chimeric molecule that has a length of 135-365 amino acid cresidues and contains four peptide-linked amino acid residue sequence domains from the N-terminus that are denominated Domains I, I, II and IV. The invention also provides nucleic acids, polypeptides, host cells, vectors and transgenic animals used in the methods of the invention. The chimeric compositions of the invention have hepatotropic and virucide activities. The methods and compositions of the present invention are useful in the fields of immunology and protein engineering, in particular for using a chimeric hepatitis B virus nucleocapsid protein as an immunogen in a vaccine for Hepatitis is infections. This sequence corepresents a Hepatitis B virus nucleocaspid (core) protein related polypeptide of the invention.
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Best Local
                                                                                          04-AUG-1994.
                                                                                                                                                                                                             Homo
                                                                                                                                                                                                                                                                  Amyloid precursor anti-beta-amyloid
                                                                                                                                                                                                                                                                                                                                                      Beta-amyloid (1-38).
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15-MAR-1995
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                               24-JAN-1994;
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                                                                                                                                                                                                          sapiens
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l Similarity 100.0%; P
30; Conservative 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
(first entry)
                               94WO-JP000089
                                                                                                                                                                                                                                                              protein; APP; Alzheimer's disease; beta-amyloid;
antibody; diagnosis.
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Pred. No. 6.9e-18;
; Mismatches 0;
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as an
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05-FEB-1993;
16-NOV-1993;
28-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antibodies which recognise specific subfragments of the beta-amyloid protein are claimed. Specifically, the antibodies (which are pref. monoclonal) recognise residues 1-16 and/or 1-28 from the N-terminal portion of beta-amyloid or they recognise residues 25-35 or 35-43 from the C-terminal portion. The antibodies are useful for assaying beta-amyloid and its derivatives for diagnosis of Alzheimer's disease. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antibodies recognising specific parts of beta-amyloid - can be used diagnosis of diseases implicating beta-amyloid, such as Alzheimer's disease.
                                           Screening
effect on
                                                                                                                                                                                                                                                                   Tachykinin agonist; beta-amyloid; inhibition; neurotoxin; treatment; Alzheimer's disease; Down's syndrome; amyloidosis; human; hereditary cerebral haemorrhage; non-inherited congophilic angiopathy.
                                                                                                                                                                                                                                                                                                                                     20-MAR-2003
30-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                             AAW92722 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 38 AA;
                     Claim 1b; Col 39-40; 28pp; English.
                                                                                                                                                                        29-JUL-1991;
                                                                                                                                                                                                                       US5876948-A.
                                                                                                                                                                                                                                                                                                               Human tachykinin agonist beta-amyloid peptide fragment #68.
                                                                                                                                                                                                                                                                                                                                                                         AAW92722;
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                                                                              WPI; 1999-189630/16
                                                                                                                                                 27-JUL-1990;
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                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                           CHILDRENS MEDICAL CENT
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                                          for neurotoxin inhibitors - by beta-amyloid peptide neurotoxic
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                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
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93JP-00019035.
93JP-00286985.
93JP-00334773.
                                                                                                                                                                        91US-00737371.
                                                                                                                                                  90US-00559173.
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.4e-18;
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This invention

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The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimidyl and maleimido groups) attached to a less therapeutically active amino acid region (IV), which covalently bonds with amino/hydroxyl/thiol groups om blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids. (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half if the land apecificity as bonding to large molecules decreases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Modifying peptidase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   neuronal cells and a beta-amyloid peptide neurotoxin. The methods can be used for identifying compounds for treating diseases characterised by an undesirable build up of beta-amyloid protein, e.g. Alzehimer's disease, Down's syndrome, and the syndromes of hereditary cerebral haemorrhage with amyloidosis and non-inherited congophilic angiopathy with cerebral haemorrhage. AAW92731 are tachykinin agonise derived from human beta-amyloid peptide fragments. (Updated on 20-MAR-2003 to correct PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 522;
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10-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amyloid beta-protein fragment peptide SEQ ID NO:1002.
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ilarity 100.0%;
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99US-0153406P.
99US-0159783P.
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Pred. No. 7.4e-18;
; Mismatches 0;
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RESULT 27
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                      The present invention describes a modified therapeutic peptide (I) CC comprising a therapeutically active amino acid region (III) and a CC reactive group (II) (e.g. succinimidy) and maleimido groups) attached to CC a less therapeutically active amino acid region (IV), which covalently CC bonds with amino/hydroxyl/thiol groups on blood components to form a CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids. CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in CC vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. CC Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half ife) and specificity as bonding to large molecules decreases CC intracellular uptake and interference with physiological processes. CC AAB90829 to AAB92441 represent peptides which can be used in the
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peptidase
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10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                                                                                                                     Disclosure; Page 513;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino hydroxyl; thiol; hormone; growth factor; neurotransmitter.
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                                                                                                                                                                                                                                                                                                                                                                                                              Bridon DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-MAY-2000;
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                                                                                                                                                                                                                                                                                                                                   and attaching therapeutic peptides to albumin prevents degradation, useful for increasing length of in vivo a
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99US-0153406P.
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Pred. No. 7.4e-18;
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Sequence 38

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Matches 30
                                                                                                                                                                                                                                                                                                                                   The invention describes a preventive and therapeutic agent (I) of an Alzheimer's disease, mild cognitive impairment or brain amyloid angiopathy, comprising a monoclonal antibody (Al) reacting specifically with a partial peptide in the C terminal of beta-amyloid or its derivative(s), where Al does not recognize the partial peptide of beta-amyloid comprising a 11 amino acid sequence (SEQ ID NO. 8) fully defined in the specification. (Al) is useful for manufacturing the preventive-therapeutic agent (I) which is administered in order to prevent and treat alzheimer's disease, mild cognitive impairment or brain amyloid angiopathy. (I) is useful as diagnostic agent for Alzheimer's disease. (I) is useful as diagnostic agent for Alzheimer's disease. (I) is capable of removing beta-amyloid from a formed senile plaque. (I) inhibits aggregation of beta-amyloid in the brain. (I) arrests beta-amyloid at the periphery region. (I) does not induce bleeding from the cerebral blood vessel. This is the amino acid sequence of human beta-amyloid residues 1-38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cerebroprotective; nootropic; neuroprotective; diagnostic; antibody therapy; Alzheimers disease; degeneration; neurological disease; cognitive disorder; beta-amyloid; amyloid protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Preventive and therapeutic agent useful for treating and preventing Alzheimer's disease, mild cognitive impairment, or brain amyloid angiopathy, comprises antibody capable of reacting with partial peptide in C-terminal of beta-amyloid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 5; SEQ ID NO 1; 44pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-SEP-2004; 2004WO-JP013397
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TAKE ) TAKEDA PHARM CO LTD.
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                                                                                                                                                                                                                                                                                       Sequence
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                                                                                 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                100.0%;
llarity 100.0%;
Conservative 0
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                                                                                                                                                                   0,
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                                                                                                                                                                   Score 162; DB 9;
Pred. No. 7.4e-18;
Mismatches 0;
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                                                                                                                                                                                                                      Length 38
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05-FEB-1993;
16-NOV-1993;
28-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antibodies which recognise specific subfragments of the beta-amyloid protein are claimed. Specifically, the antibodies (which are pref. monoclonal) recognise residues 1-16 and/or 1-28 from the N-terminal portion of beta-amyloid or they recognise residues 25-35 or 35-43 from the C-terminal portion. The antibodies are useful for assaying beta-amyloid and its derivatives for diagnosis of Alzheimer's disease. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antibodies recognising specific parts of beta-amyloid - can be used diagnosis of diseases implicating beta-amyloid, such as Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amyloid precursor anti-beta-amyloid
                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 39 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease.
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15-MAR-1995
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                                                                          Amyloid beta; Abeta; deoxygenated solvent; evaporative deposition; research; neurotoxicity; free-radical; glutamine synthetase.
                                                                                                                                                                                                                                28-JAN-1999
                                                                                                                                                                                                                                                                                                                                             AAW81472
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TAKE ) TAKEDA CHEM IND LTD
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                                                                                                                                                                                                                                                                                                                                             standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
                                                                                                                                                                   amyloid beta (Abeta)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Score 162; DB 2; larity 100.0%; Pred. No. 7.6e-18; Conservative 0; Mismatches 0;
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93JP-00019035.
93JP-00286985.
93JP-00334773.
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antibody; diagnosis.
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                                                                                                                                                                   peptide 7 (residues 1-39).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human amyloid beta-A4 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY25134 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amyloid protein; beta-A4 peptide; aggregation; screening; inhibition; therapeutic drug; brain; Alzheimer's disease.
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  Determination of degree
                                                      WPI; 1999-403957/34.
                                                                                                                                                                                                                                                                  17-JUL-1996;
                                                                                                                                                                                                                                                                                                                     06-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                         US5919631-A.
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                                                                                                                                                             (HMRI ) HOECHST
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                                                                                                          SR,
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                                                                                                                                                             MARION ROUSSEL INC.
                                                                                                          Paul
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of aggregation
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                                                                                                          Goyal S,
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Pred. No. 7.6e-18;
; Mismatches 0;
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                                                                                                          Riedel NG
  of a peptide, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            for treating a synthetic
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RESULT 32
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The invention relates to a measurement of the full length beta-amyloid (Abeta) peptide level of a specific Abeta peptide in a sample containing multiple types of Abeta peptide, by capturing and binding one terminus of the types of Abeta peptides with a first antibody. The specific Abeta peptide is captured and bound at an opposite non-overlapping terminus with a second peptide. The invention is used for measuring full length Abeta peptide level useful for tracking the progression of Alzheimer's disease. The new method uses one specific antibody that recognises the N-terminus of all the Abeta peptides and a panel of detection antibodies that distinguish each Abeta peptide (Abeta 1-43, 1-42, 1-41, 1-40 and 1-
                                                                                                                                                                                                                                                                                                                                                    Fong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (I); (b) measuring the amount of (II) bound to (I) to obtain a value (i); (c) repeating steps (a) and (b) with a second sample at a different time to obtain a second value (ii); and (d) determining the difference between (i) and (ii) which is inversely related to the degree of aggregation of (I). This method may be applied to a screen for compounds that inhibit aggregation of (I). These inhibitors may be used as therapeutic drugs to inhibit the formation of these aggregates in the brains of patients suffering from Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes a novel method for the determination of the degree of aggregation of an amyloid beta A4 peptide (1) in solution. Determination comprises: (a) incubating a sample of unaggregated (I) with Coomassie Brilliant Blue G 250 dye (II) which only binds to unaggregated (1); (b) measuring the amount of (II) bound to (I) to obtain a value (1); (1)
                                                                                                                                                                                                        Disclosure; Fig le; llpp;
                                                                                                                                                                                                                                         Enabling measurement of full length beta-amyloid peptide level tracking progression of Alzheimer's disease, comprises capturing binding terminus of beta-amyloid peptide with antibodies.
                                                                                                                                                                                                                                                                                                                  WPI; 2003-328616/31
                                                                                                                                                                                                                                                                                                                                                                                                                             18-FEB-2000;
16-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human amyloid beta peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABU08509 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 39 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-JAN-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2002182660-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Col 5-6; 8pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            identifying therapeutic drugs for treating Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                          (FONG/)
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2001US-00784854.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide (1-39); Alzheimer's disease; antigen; Abeta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                        English.
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Pred. No. 7.6e-18;
; Mismatches 0;
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                                                                                                                                                                                                                                                              capturing
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The present invention describes a method for inhibiting amyloid toxicity or the formation of an amyloid deposit. The method comprises administering a dosage of one or more agent(s) that bind(s) to a molecule selected from an integrin submit such as alphacetal or alphav, alphac or betal, an integrin such as alphacetal, alphacetal or alphavebral, and laminin, under conditions such that the agent(s) inhibit amyloid toxicity or the formation of an amyloid deposit. Amyloids have mootropic, neuroprotective, antidiabetic and antiparkinsonian activities, and can be used in gene therapy. The method is useful for inhibiting amyloidogenic protein toxicity, inhibiting the formation of an amyloidogenic protein toxicity, inhibiting the formation of an amyloidogenic protein deposit and/or treating amyloidogenic diseases, such as Alzheimer's disease, type II diabetes, Parkinson's disease, a disease caused all or in part by prion infection, hereditary or systemic amyloidosis, or Down's syndrome. The present sequence represents a human Abeta peptide designated Abeta39, which is given in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39) by their sequence difference at the C-terminus. This use of N and terminus specific antibodies allows simultaneous quantification of several Abeta peptides in a single assay. The present sequence is that Abeta (1-39), used to raise the N and C-terminal antibodies of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; Abeta39; amyloid toxicity inhibition; amyloid; integrin subunit; integrin; laminin; nootropic; neuroprotective; antidiabetic; antiparkinsonian; gene therapy; amyloidogenic protein; prion infection; amyloidogenic protein toxicity inhibition; amyloidogenic disease; amyloidosen; parkinson's disease; amyloidosis;
                                                                                                                                                                                                                                                                                                                                                   Inhibiting amyloid toxicity comprises administering an a
                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-221770/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JUL-2001;
17-DEC-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human Abeta39 amino acid sequence SEQ ID NO:5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP96148 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          syndrome.
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Similarity 100.0%;
30; Conservative (
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                                                                                                                                                                                                                                                                                                   Page 85-86; 86pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0304315P
2001US-0341772P
                                                                                                                                                                                                                                                                                                                                                                                                                                        Wright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Yednock
                                                                                                                                                                                                                                                                                                                                                     y or the formation of an amyloid deposit, agent that binds to an integrin, integrin
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Pred. No. 7.6e-18
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Matches 30
                      The invention describes a preventive and therapeutic agent (I) of an Alzheimer's disease, mild cognitive impairment or brain amyloid angiopathy, comprising a monoclonal antibody (A1) reacting specifically with a partial peptide in the C terminal of beta-amyloid or its derivative(e), where A1 does not recognize the partial peptide of beta-amyloid comprising a 11 amino acid sequence (SEO ID NO. 8) fully defined in the specification. (A1) is useful for manufacturing the preventive-therapeutic agent (I) which is administered in order to prevent and treat Alzheimer's disease, mild cognitive impairment or brain amyloid at the periphery region. (I) is capable of removing beta-amyloid from a formed senile plaque. (I) inhibits aggregation of beta-amyloid in the brain. (I) arrests beta-amyloid at the periphery region. (I) does not induce bleeding from the cerebral blood vessel. This is the amino acid sequence of human beta-amyloid residues 1-38.
                                                                                                                                                                                                                                                                      Preventive and therapeutic agent useful for treating and preventing Alzheimer's disease, mild cognitive impairment, or brain amyloid angiopathy, comprises antibody capable of reacting with partial pept in C-terminal of beta-amyloid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cerebroprotective; nootropic; neuroprotective; diagnostic; Alzheimers disease; degeneration; neurological disease; cognitive disorder; beta-amyloid; amyloid protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human beta-amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADY81763 standard; peptide;
 Sequence
                                                                                                                                                                                                                                                                                                                                            WPI; 2005-242286/25
                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-2003; 2003JP-00317443
                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-SEP-2004; 2004WO-JP013397
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   39
                                                                                                                                                                                                                                               SEQ ID NO 2; 44pp; Japanese
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   AA;
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                                                                                                                                                                                                                                                                                                                                                                      Suzuki N;
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Pred. No. 7.6
); Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunotherapy;
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RESULT 35
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ID AAR33191
AC AAR33
XX AAR33
XX Beta-
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XX Alzhe
XX Alzhe
XX Synth
XX W093C
XX W093C
XX W093C
XX W10-AL
XX (MIM
PR 11-AL
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PA (HARL
PR 13-AL
XX (MIM
PT 13-
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AAR60364
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Matches 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The peptide is an internal fragment of the beta amyloid peptide (BAP) precursor, which was produced synthetically. The peptide, when labelled, may be used in in vitro methods for the detection of Alzheimer's disease see also AAR33192. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detecting Alzheimer's disease using beta-amyloid peptide - includes quantitating amyloid deposition onto tissue samples, and using screen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maggio JE,
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                                                                                                                                      Amyloid precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 34; 51pp; English
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01-JUL-1993
                      WO9417197-A1
                                                                    Homo sapiens
                                                                                                                     anti-betā-amyloid
                                                                                                                                                                                            Beta-amyloid (1-40)
                                                                                                                                                                                                                                          25-MAR-2003
15-MAR-1995
                                                                                                                                                                                                                                                                                                                 AAR60364;
                                                                                                                                                                                                                                                                                                                                                               AAR60364 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              agents as therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-AUG-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's disease; amyloid deposition; diagnosis; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beta-amyloid
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30; Conserv
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llarity 100.0%;
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                                                                                                                  protein; APP; Alzheimer's
antibody; diagnosis.
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Pred. No. 7.9e-18;
Mismatches 0;
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                                                                                                                                            disease;
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RESULT 37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antibodies which recognise specific subfragments of the beta-amyloid protein are claimed. Specifically, the antibodies (which are pref. monoclonal) recognise residues 1-16 and/or 1-28 from the N-terminal portion of beta-amyloid or they recognise residues 25-35 or 35-43 from the C-terminal portion. The antibodies are useful for assaying beta-amyloid and its derivatives for diagnosis of Alzheimer's disease. (Updated on 25-MAR-2003 to correct PN field.)
                   WPI; 1995-132760/18
                                        May
                                                                                                                                                               EP646792-A1.
                                                                                                                                                                                                          neurotoxic effect; beta-amyloid peptide; neurotoxicity inhibitor; amyloidogenic amylin; beta_2-microglobulin; amylin; Alzheimer's cDown's syndrome; beta-amyloid neurotoxicity assay; human; beta-amyloid 1-40; beta-140.
                                                                                                                                                                                                                                                                                       01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 40
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28-DEC-1993;
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                                                              (ELIL ) LILLY & CO ELI. (ATHE-) ATHENA NEUROSCI
                                                                                                19-AUG-1993;
                                                                                                                   17-AUG-1994;
                                                                                                                                         05-APR-1995
                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                 Human beta-amyloid 1-40 (beta1-40)
                                                                                                                                                                                                                                                                                                              ADD11651;
                                                                                                                                                                                                                                                                                                                                   ADD11651 standard; protein; 40 AA.
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                                                               ATHENA NEUROSCIENCES
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                                                                                                                                                                                                                                                                                       (first entry)
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93JP-00019035.
93JP-00286985.
93JP-00334773.
                                         RE;
                                                                                                93US-00109782
                                                                                                                   94EP-00306053
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g specific parts of beta-amyloid -
implicating beta-amyloid, such as
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                                                                INC
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Pred. No. 7.9e-18;
Mismatches 0;
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Alzheimer's
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Assay for effectiveness of agents used in the treatment of Alzheimer's

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(a) incubating potential inhibitors of neurotoxicity with an amyloidogenic amylin or beta 2-microglobulin; (b) measuring the neurotoxic properties of each amylin or beta 2-microglobulin; potential inhibitor mixture; and (c) detecting reduction in the neurotoxicity relative to a control. The preferred amyloidogenic amylin is human amylin. The method is especially for assessing the ability of an agent to smeliorate the neurotoxic effects of Alzheimer's disease or Down's syndrome. The method provides a more consistent beta-amyloid neurotoxicity assay and is more sensitive and covers a broader range. This is the amino acid sequence of human beta-amyloid 1-40 (beta1-40).
peptides AAM23335-36 are portions of the the amyloid beta peptide, which is the principal component of extracellular deposite in Alzheimer's disease. It has been shown to promote nuerite outgrowth, generate reactive oxygen intermediates, induce cellular oxidant stress, lead to neuronal cytotoxcity, and promote microglial activation. The present peptide, which comprises amino acids 1-40 of the amyloid beta peptide,
                                                                                                                                                                                                                                      Inhibiting damage to cells which inhibits interaction advanced glycosylation end
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                                                                                                                                                                                     Claim 4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          beta peptide; extracellular deposit; Alzheimer's disease; outgrowth; microglial activation; neuronal cell degeneration; rfor advanced glycosylation end product; beta peptide fibril.
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                                                                                                                                                                                                                                   in e.g. Alzheimer's disease - using an agent of an amyloid-beta peptide with a receptor for product.
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amyloid
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Pred. No. 7.9e-18;
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A novel method has been developed of assaying for soluble amyloid precursor protein (sAPP). The method uses an antibody against amy beta-protein (A beta, produced from sAPP) or sAPP. The present serpresents amino acids 1 to 40 of amyloid beta-protein. sAPP can be represents amino acids 1 to 40 of amyloid beta-protein.

amyloid

Assay for soluble amyloid precursor protein useful to Alzheimer's disease - uses antibodies against amyloid new hybridoma producing antibodies.

diagnose beta-protein,

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English.

WPI; 1997-343989/32. Taniguchi Y, (ORIY)

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the N-terminus of A beta and a monoclonal antibody recognising sAPP, the cassay can be used to diagnose Alzheimer's disease. Senior plaque observed in the brain of Alzheimer's patients is primarily composed of A beta, which is generated from sAPP. Simple and accurate assay of sAPP is coposible. The antibody (preferably monoclonal) preferably has an antigen recognition site which is an amino acid sequence common to A beta and sAPP or specific to sAPP. The sAPP assayed for preferably has part of the A beta sequence at its amino terminus and is preferably solubilised through cleavage of the A beta between positions 16 (lysine) and 17 (leucine) from the amino acid terminus. The preferred method comprises immobilising one antibody (especially generated by (2)) on to an consoluble carrier, capturing a substance to be assayed on to this antibody, reacting another, labelling, antibody with the assay substance and detecting the activity of the labelling substance bound to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loc
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                                                             The present sequence was used in the development of a novel in vitro screening assay for agents capable of affecting the deposition of beta-amyloid peptide (BAP) on tissue. The method comprises contacting a silk sample with labelled BAP, optionally in the presence of a test agent, detecting the amount of label bound to the silk and assessing the effect of the agent on the deposition of BAP. Agents that inhibit binding of BAP to silk are potentially useful for treating amyloidosis diseases, especially Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                     New in vitro screening assay for Alzheimer's disease drugs - componssessing binding of labelled beta-amyloid peptide to silk sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-168404/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MINU )
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Screening assay; beta-amyloid peptide; treatment; amyloidosis disease; Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW47226 standard; peptide; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        assayed accurately, the N-terminus of A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-AUG-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5721106-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beta-amyloid peptide residues 1-40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-MAY-1998
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                                                                                                                                                                                                                                                                                                                                                                                           8
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                                                                                                                                                                                                                                                                                                                                                                                   29-30; 36pp;
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                                                                                                                                                                                                                                                                                                                                                                                       English.
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Pred. No. 7.9e-18;
; Mismatches 0;
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Best Local S
Matches 30
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                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                       and can be used in the method of the invention. The method is for inducing amyloid plaque deposition in a mammal by infusing into the brair an amyloid peptide (I) at a basic pH. Animals in which amyloid plaque deposition has been induced are models of human Alzheimer's disease (AD) and are used to screen for agents (A) that inhibit: (a) deposition of amyloid plaque; and (b) AD-associated disruptions to sleep and circadian activity. They may also be used to study the etiology of AD. Compared with known methods for inducing plaque deposition, this process causes less mechanical damage; the vehicle used is less neurotoxic and at basic pH (I) is soluble enough for delivery by continuous infusion with effective delivery to brain tissue. The control peptide causes few, if
                                                                                                                                                                                                                   Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-326700/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Majocha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beta-amyloid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human beta-amyloid protein
                                                                                                                                                                                                                                                                                                animals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents a fragment of the human beta-amyloid protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inducing amyloid plaque deposition against Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MIRI-) MIRIAM HOSPITAL LIFESPAN PARTNER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-MAY-1999.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY14099;
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                                                                                                                                                                                                                                                                                                                         plaques and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Page 30; 43pp; English.
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                                                                                                                                                                                                                                                                    aques and does not stimulate an immune response. Most of develop AD-type pathology (contrast transgenic models), including sleep and circadian rhythm disturbances
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R, Tate BA,
                                                                                                                                    Similarity
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                                                                                                                                                                                                                   A
                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human; amyloid plaque deposition; Alzheimer's disease; sleep; circadian activity; circadian rhythm disturbance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-00959148
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                                                                                                  Score 162; DB 2;
Pred. No. 7.9e-18;
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Pred. No. 7.9e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a mammal, used to screen
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                                                                                                                                                           Length
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                                                                                                           Indels
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RESULT 43
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Best Local &
                                                                                                                                                                                                                                                                                              This sequence represents a fragment of the beta-amyloid protein. The invention relates to a method for treating or preventing a form of amyloidosis, including Alzheimer's disease using this sequence. The compositions may be useful for treating or preventing the amyloidosis associated with long-standing inflammation, various forms of malignancy (including B-cell type malignancies), Familial Mediterranean Fever, multiple myeloma, plasma cell dyscrasias, long-term haemodialysis, carpal tunnel syndrome, joint swelling, multiple spontaneous fractures, radiolucency in the wrist and hip, endocrine tumours, medullary carcinoma of the thyroid, diabetes, Alzheimer's disease, Down's syndrome, creutzfeldt-Jakob disease, Gerstmann Straussler Syndrome, kuru, scrapie and other subacute spongiform encephalopathies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beta-amyloid protein; Alzheimer's disease; amyloidosis; joint swelling; long-standing inflammation; malignancy; Familial Mediterranean Fever; multiple myeloma; plasma cell dyscrasia; long-term haemodialysis; kuru; carpal tunnel syndrome; multiple spontaneous fracture; radiolucency; endocrine tumour; medullary carcinoma; Down's syndrome; scrapie; Creutzfeldt-Jakob disease; Gerstmann Strausiler Syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptides of 6-8 amino acids useful for treating or preventing amyloidosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-561062/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-SEP-1992;
23-OCT-1992;
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   Aggregation;
                          Wild type aggregating amyloid-beta peptide.
                                                                                                   AAW99584 standard; peptide;
                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           subacute spongiform
                                                    22-JUN-1999
                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         standard;
                                                                                                                                                                                                                                                                          40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Col 67-68; 83pp; English.
                                                                                                                                                                                                                      100.0%; Score 162; DB 2; llarity 100.0%; Pred. No. 7.9e-18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WASHINGTON
 amyloid-beta peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                    (first entry)
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92US-00969734.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-00461216.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           encephalopathy; therapy.
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fluorescent group; detection;
                                                                                                                                                                                                                                                Length 40;
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                                                                                                                                                                                                                      Gaps
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AAW81473
ID AAW
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Best L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence corresponds to an aggregating amyloid-beta peptide which can be covalently labelled with a fluorescent group. The detection or monitoring of an amyloid aggregate in a sample can be used to diagnose or detect a predisposition to Alzheimer's disease. The screening assays can be used to identify compounds for the treatment or amelioration of Alzheimer's disease or its symptoms. The fluorescent derivatives of the amyloid-beta peptide are also useful for exploring other aspects of amyloid structure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Glabe C,
   Process
                             WPI; 1999-034120/03.
                                                                                                        29-FEB-1996;
                                                                                                                              29-FEB-1996;
                                                                                                                                                                                  US5840838-A.
                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                  Amyloid beta; Abeta; deoxygenated solvent; evaporative deposition; research; neurotoxicity; free-radical; glutamine synthetase.
                                                                                                                                                                                                                                                                          Synthetic amyloid beta (Abeta) peptide 8 (residues 1-40).
                                                                                                                                                                                                                                                                                                    28-JAN-1999
                                                                                                                                                                                                                                                                                                                              AAW81473;
                                                                                                                                                                                                                                                                                                                                                      AAW81473 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 21; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New fluorescent labeled amyloid A-beta peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-190112/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-AUG-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnosis, Alzheimer's
                                                    Aksenov M,
                                                                              (KENT)
                                                                                                                                                          24-NOV-1998.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 100
30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -beta peptide
structure
   for treating synthetic amyloid beta peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                                                                     DAEFRHOSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Garzon-Rodriguez W;
                                                    Carney JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                        96US-00609090.
                                                                                                                                96US-00609090.
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Pred. No. 7.9e-18;
; Mismatches 0;
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                                                     Butterfield
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Length 40; Indels

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AAY39339
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Best Local
Sequences AAW81466 to AAW81476 represent synthetic amyloid beta (Abeta) peptides. The invention provides a process for treating a synthetic Abeta peptide that comprises dissolving the peptide in a deoxygenated solvent selected from trifluoroethanol, hexafluorocyclohexane, dimethyl sulphoxide, morpholinopropanesulphonic acid, dimethylformamide and acetonitrile to a concentration of 0.01-10 mg/ml, incubating the solution at 20-65 deg. C for 0.5-4 hour, and removing the solvent by 'evaporative deposition' in 5-10 minutes. Synthetic amyloid beta peptides are useful as research tools for studying neurotoxicity resulting from Abeta peptide of the synthetic Abeta production. The treatment increases the activity of the synthetic Abeta peptides in tests to determine free-radical graduations synthetase inactivation
                                                                                                                                                                                                                                                                      macromolecules, for, e.g. identification of Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beta-amyloid protein; Alzheimer's disease; extracellular amyloid cerebral blood vessel; sulphated macromolecule; Kuru; congophilic maltese-cross spherical amyloid plaque; Creutzfeldt-Jacob disease; Gertsmann-Straussler syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Castillo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta-amyloid protein.
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                                                                                                                                                                                                                                            Page 87; 89pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Snow AD;
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Pred. No. 7.9e-18;
Mismatches 0;
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treating
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RESULT 46
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                                  Matches
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Best Local
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                                                                                                       This invention describes a novel method for the determination of the degree of aggregation of an amyloid beta A4 geptide (I) in solution. Determination comprises: (a) incubating a sample of unaggregated (I) with Coomassie Brilliant Blue G 250 dye (II) which only binds to unaggregated (I); (b) measuring the amount of (II) bound to (I) to obtain a value (i); (c) repeating steps (a) and (b) with a second sample at a different time to obtain a second value (ii); and (d) determining the difference between (i) and (ii) which is inversely related to the degree of aggregation of (I). This method may be applied to a screen for compounds that inhibit aggregation of (J). These inhibitors may be used as therapeutic drugs to inhibit the formation of these aggregates in the brains of patients suffering from Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                 Sequence
                                                                                                                                                                                                                                                                                Disclosure; Col 5-6;
                                                                                                                                                                                                                                                                                                       Determination of degree of aggregation of a peptide, useful identifying therapeutic drugs for treating Alzhelmer's disea
                                                                                                                                                                                                                                                                                                                                                                          Sahasrabudhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amyloid protein;
therapeutic drug;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY25135 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      study the formation of amyloid plaques and to identify anti-plaque therapeutics. They can be used for diseases such as Alzheimer's disease, Cretzfeldt-Jakob disease, Gerstmann-Straussler syndrome and kuru
                                                                                                                                                                                                                                                                                                                                                                                                                           17-ЛИТ-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JUL-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human amyloid beta-A4
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                          Paul JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       beta-A4 peptide; aggregation;
brain; Alzheimer's disease.
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                                                                                                                                                                                                                                                                                gpp;
                                             100.0%;
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                                Score 162; DB 2;
Pred. No. 7.9e-18;
; Mismatches 0;
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Pred. No. 7.9e-18;
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RESULT 48
AABB4426
ID AABB426
XX AABB4
AC AABB4
AC AABB4
COM 22-AU
COM Parti
XX Beta
KW Vacci
XX Homo
OS Homo
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AAW92723
ID AAW92
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Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a method for screening compounds for inhibiting a neurotoxin. The method involves incubating tachykinin agonists with neuronal cells and a beta-amyloid peptide neurotoxin. The methods can be used for identifying compounds for treating diseases characterised by an undesirable build up of beta-amyloid protein, e.g. Alzheimer's disease, Down's syndrome, and the syndromes of hereditary cerebral haemorrhage with amyloidosis and non-inherited congophilic angiopathy with cerebral haemorrhage. AAW92655-W92731 are tachykinin agonists derived from human beta-amyloid peptide fragments. (Updated on 20-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Screening for neurotoxin inhibitors - by testing compounds for their effect on beta-amyloid peptide neurotoxic effect on neuronal cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tachykinin agonist; beta-amyloid; inhibition; neurotoxin; treatment; Alzheimer: disease; Down's syndrome; amyloidosis; human; hereditary cerebral haemorrhage; non-inherited congophilic angiopathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-2003
30-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAW92723 standard; peptide; 40 AA.
                                                                                                                    22-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                     Sequence 40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1b; Col 41-42; 28pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-189630/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-JUL-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human tachykinin agonist beta-amyloid peptide fragment
                                                         Beta-amyloid precursor protein; APP; chimeric peptide; B cell epitope;
                                                                                     Partial sequence of a human beta-amyloid precursor protein.
                                                                                                                                                                          AAB84426 standard; peptide; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CHIL-) CHILDRENS MEDICAL CENT
                                                                                                                                                                                                                                                  1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                           1 Similarity
30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BA;
                                                                                                                                                                                                                                                                                                          100.0%; Score 162; DB 2; llarity 100.0%; Pred. No. 7.9e-18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first en
                                                                                                                 (first entry)
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                                                                                                                                                                            ₿
                                                                                                                                                                                                                                                                                                                                       Length 40;
                                                                                                                                                                                                                                                                                                             0
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Query Match
Best Local S
Matches 30
                                                                                                       The present sequence represents a partial sequence of a human beta-
amyloid precursor protein (APP). The peptide is used to create chimeric
peptides of the invention. The chimeric peptides contain a N- or C-
terminal end-specific B cell epitope from a naturally occurring internal
peptide cleavage product of a precursor or mature protein, as a free N-
or C-terminus, joined to a T cell epitope, with or without a spacer amino
acid residue. Chimeric peptides comprising betaAPP peptides slow down,
reduce or prevent the accumulation of amyloid beta peptide in the
extracellular space, interstitial fluid and cerebrospinal fluid of the
brain, and aggregation into senile amyloid deposits or plaques. They also
block the interaction of amyloid beta peptides with other molecules that
contribute the neurocoxicity of amyloid beta. The chimeric peptides are
useful for immunizing humans against the free N- or C-terminus of an
internal self peptide cleavage product (e.g. APP peptide) derived from a
precursor protein or a mature protein. The internal peptide cleavage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel chimeric peptide containing N- or C-terminal end-specific B cell epitope from naturally occurring internal peptide cleavage product (su as beta amyloid peptide) of a precursor protein, joined to T cell
                                                                            Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Page 41; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-381648/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-DEC-2000; 2000WO-US033203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MIND-) MINDSET BIOPHARMACEUTICALS USA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200142306-A2
  30;
                    Similarity
                                                                            ₽,
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0169687P
                 100.0%;
0; Mismatches
                    Score 162; DB 4;
Pred. No. 7.9e-18;
  o,
                                   Length
    Indels
  0
  Gaps
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RESULT 49
AAB91813
ID AAB91
XX
AAB91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino hydroxyl; thiol; hormone; growth factor; neurotransmitter.
      17-MAY-1999;
                                                                                                       17-MAY-2000; 2000WO-US013576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amyloid beta-protein fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAB91813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAB91813 standard; peptide;
                                                                                                                                                                                                              23-NOV-2000.
                                                                                                                                                                                                                                                                                                               WO200069900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
      99US-0134406P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO:989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        xy1; maleimido group; amino;
neurotransmitter.
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RESULT 50
AAB91780
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a modified therapeutic peptide (I) CC comprising a therapeutically active amino acid region (III) and a CC reactive group (II) (e.g. succinimidy] and maleimido groups) attached to CC a less therapeutically active amino acid region (IV), which covalently CC bonds with amino/hydroxyl/thiol groups on blood components to form a CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth CC components and neurotransmitters, to protect them from peptidase activity in CC vivo for the treatment of various disorders. Endogenous therapeutic competides are not suitable as drug candidates as they require frequent CC deministration due to rapid degradation by peptidases in the body.

CC Modifying and attaching therapeutic peptides to albumin prevents or CC reduces the action of peptidases to increase length of activity (half CC life) and specificity as bonding to large molecules decreases CC intracellular uptake and interference with physiological processes.

CC AAB90829 to AAB92441 represent peptides which can be used in the CC exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                        17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                                                                    Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                               Amyloid beta-protein fragment peptide SEQ ID NO:956
                                                                                                                                                                                                                                                                                                                                              22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                        AAB91780 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptidase degradation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-112059/12
Bridon
                                                                                                                   17-MAY-2000; 2000WO-US013576.
                                                                                                                                                   23-NOV-2000.
                                                                                                                                                                               WO200069900-A2
                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-SEP-1999;
15-OCT-1999;
                             (CONJ-) CONJUCHEM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CONJ-) CONJUCHEM INC
DP,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; ilarity 100.0%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 518;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ezrin AM,
Ezrin AM,
                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                        99US-0134406P.
99US-0153406P.
99US-0159783P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0153406P.
99US-0159783P.
                                                                                                                                                                                                                                                modification; su hormone; growth
                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           733pp;
Milner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Milner PG,
                                                                                                                                                                                                                                                                                                                                                                                                           40
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Pred. No. 7.9e-18;
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g
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 Holmes
DĽ,
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 Thibaudeau
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RESULT 51
AAB91829
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a modified therapeutic peptide (I) CC comprising a therapeutically active amino acid region (III) and a CC reactive group (II) (e.g. succinimidyl and maleimido groups) attached to CC a less therapeutically active amino acid region (IV), which covalently CC bonds with amino/hydroxyl/thiol groups on blood components to form a CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids. CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity in CC vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent CC composed are not suitable as drug candidates as they require frequent CC administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half contracellular uptake and interference with physiological processes. CC AAB90829 to AAB92441 represent peptides which can be used in the cc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                            17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
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          Modifying and attaching therapeutic peptides to albumin prevents peptidase degradation, useful for increasing length of in vivo a
                                                       WPI; 2001-112059/12.
                                                                                    Bridon
                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                       Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAB91829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI;
                                                                                                                                                                                                      17-MAY-2000; 2000WO-US013576
                                                                                                                                                                                                                                    23-NOV-2000.
                                                                                                                                                                                                                                                               WO200069900-A2
                                                                                                                                                                                                                                                                                                                                      hydroxyl;
                                                                                                                                                                                                                                                                                                                                                                                                  Amyloid beta-protein fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB91829
                                                                                                                  (CONJ-) CONJUCHEM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; peptide;
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                                                                                                                                                                                                                                                                                                                                        thiol;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and attaching therapeutic peptides to albumin prevents degradation, useful for increasing length of in vivo a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                   Ezrin AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                            99US-0134406P.
99US-0153406P.
99US-0159783P.
                                                                                                                                                                                                                                                                                                                                      hormone; growth factor; neurotransmitter.
                                                                                                                   INC
                                                                                                                                                                                                                                                                                                                                                                                                                                entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
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                                                                                      Milner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
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Pred. No. 7.9
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                 peptide
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                                                                                      Holmes
                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO:1005.
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7.9e-18;
es 0;
                                                                                   DĽ,
                                                                                      Thibaudeau
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 40
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                activity.
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Disclosure;

Page

733pp; English.

Matches Query Match Best Local

30;

0;

Mismatches

Score 162; DB 4; Pred. No. 7.9e-18;

Length 40; Indels

0,

Gaps

0

Similarity

Sequence

40

AA;

The present invention describes a modified therapeutic peptide (I) CC comprising a therapeutically active amino acid region (III) and a CC reactive group (II) (e.g. succinimidy) and maleimido groups) attached to CC conds with amino/hydroxyl/thiol groups on blood components to form a CC peptidase stabilised therapeutic peptide composed of 3-50 amino acids. CC (I) are useful for modifying therapeutic peptides e.g. hormones, growth CC factors and neurotransmitters, to protect them from peptidase activity in CC vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent CC peptides are not suitable as drug candidates as they require frequent CC modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half (if) and specificity as bonding to large molecules decreases (cc intracellular uptake and interference with physiological processes. CC AAB90829 to AAB92441 represent peptides which can be used in the CC exemplification of the present invention

in

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RESULT 52
AAB91802
ID HAB91
XX AAB91
XX AAB91
XX PATE

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10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                           Modifying
peptidase
The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a reactive group (II) (e.g. succinimidyl and maleimido groups) attrached to a less therapeutically active amino acid region (IV), which covalently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidyl; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                       WPI; 2001-112059/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-MAY-2000; 2000WO-US013576
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amyloid beta-protein fragment peptide SEQ ID NO:978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200069900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                         (CONJ-)
                                                                                                                                                                                                                                                                                                                                                                DP,
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                                                                                                                                                                                                                                                                                                                                                                                                                         CONJUCHEM INC.
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                                                                                                                                                                                                       and attaching degradation, u
                                                                                                                                                  Page
                                                                                                                                                                                                                                                                                                                                                                Ezrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; ilarity 100.0%; Conservative 0
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99US-0153406P.
99US-0159783P.
                                                                                                                                                  514;
                                                                                                                                                                                                                                                                                                                                                             AM,
                                                                                                                                              733pp;
                                                                                                                                                                                                           y therapeutic peptides useful for increasing
                                                                                                                                                                                                                                                                                                                                                                    Milner
                                                                                                                                                  English.
                                                                                                                                                                                                                                                                                                                                                                PG,
                                                                                                                                                                                                                                                                                                                                                                Holmes
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                                                                                                                                                                                                           to albumin
length of
                                                                                                                                                                                                                                                                                                                                                             Thibaudeau
                                                                                                                                                                                                              in vivo a
                                                                                                                                                                                                                                                                                                                                                                χ,
                                                                                                                                                                                                              activity
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Homo sapiens.

WO200152890-A1.

Heat shock protein and antigenic molecule complexes, useful prevention and treatment of neurodegenerative disorders e.g. dementia, Alzheimer's disease and epilepsy.

for the senile

WPI; 2001-451897/48.

Srivastava

21-JAN-2000; 18-JAN-2001; 26-JUL-2001.

(UYCO-)

AIND

CONNECTICUT HEALTH CENT. 2000US-00489216. 2001WO-US001825

Disclosure;

The present

invention relates Page 13; 65pp; English.

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pharmaceutical compositions

comprising

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RESULT 53
AAE05483
ID AAE05
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                                                                                                                                                            Query Match
Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                             bonds with amino/hydroxyl/thiol groups on blood components to form a peptidase stabilised therapeutic peptide composed of 3-50 amino acids. (1) are useful for modifying therapeutic peptides e.g. hormones, growth factors and neurotransmitters, to protect them from peptidase activity i vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Modifying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half intracellular uptake and interference with physiological processes. Alago829 to Alago2441 represent peptides which can be used in the exemplification of the present invention
                                                                                                                                                                                                                                  Sequence 40 AA;
                                                                                    Conservative
                                                                                                                                                        100.0%; S
100.0%; F
htive 0;
                                                                                                                                                        Score 162; DB 4;
Pred. No. 7.9e-18;
Mismatches 0;
                                                                                        30
                                                                                                                        30
                                                                                                                                                                                              Length 40;
                                                                                                                                                              Indels
                                                                                                                                                              ٥,
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                   in
                                                                                                                                                              0;
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Human; heat shock protein; hsp; A beta 40; beta amyloid; hypotensive; neurodegenerative disorder; vaccine; Alzheimer's disease; hypertension; age-related cognitive function loss; senile dementia; Wilson's disease; Parkinson's disease; amylotrophic lateral sclerosis; cerebroprotective; cerebral paley; progressive supranuclear paley; Guam disease; ataxia; Lewy body dementia; prion disease; spongiform encephalopathy; glaucoma; Creutzfeldt-Jakob disease polyglutamine disease; Huntington's disease; myotonic dystrophy; neuropsychiatric disease; Functington's disease; cilles de la Tourette's syndrome; nootropic; chronic seizure disorder; stroke; brain trauma; spinal cord trauma; acquired immunodeficiency syndrome; AIDS; dementia; alcoholism; autism; retinal ischaemia; ophthalmological; vasotropic; neuroprotective; anti-HIV; human immunodeficiency virus; anticonvulsant; epilepsy; neuroleptic; immunostimulant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAE05483 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide antigen comprising beta amyloid (Abeta) 40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
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RESULT 54
AAU99425
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disorders e.g. Alzheimer's disease, age-related loss of cognitive function, senile dementia, Parkinson's disease, amylotrophic lateral sclerosis, Wilson's disease, cerebral palsy, progressive supranuclear palsy, Guam disease, Lewy body dementia, prion diseases, spongiform encephalopathies, Creutzfeldt-Jakob disease, polyglutamine diseases, Huntington's disease, myotonic dystrophy, Freidrich's ataxia, ataxia, Gilles de la Tourette's syndrome, seizure disorders, epilepsy, chronic seizure disorder, stroke, brain trauma, spinal cord trauma, acquired immunodeficiency syndrome (AIDS) dementia, alcoholism, autism, retinal ischaemia, glaucoma, autonomic function disorder, hypertension, neuropsychiatric disorder, schizophrenia or schizoaffective disorder and for eliciting an immune response. The present sequence is human peptide antigen comprising beta amyloid (Abeta) 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disorders
used as va
                                                                                                                                                                                         Identifying compounds that stabilize I-helix of discordant helix polypeptide, by measuring amount of I-helix in sample containing discordant helix-containing polypeptide in presence and absence of the containing polypeptide in presence and absence and absence and 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2000;
06-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-2001; 2001WO-GB005117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human amyloid beta-peptide
                                                                                                                                                                                                                                                                                                                WPI; 2002-519389/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                  (ALPH-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200241002-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       theta-strand structure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       I-helical conformation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAU99425 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibrillation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                heta-strand structure; amyloidogenic disorder; Abeta; amyloidosis; lzheimer's disease; prion disease; scraple; BSE; ovine spongiform encephalopathy. Creutzfeld-Jacob disease; CJD; ibrillation; aggregation; nootropic; neuroprotective; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      as vaccines
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                                                                                                                                                                                                                                                                                                                                                               ALPHABETA AB WHITE M P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for use in treatment and prevention of neurodegenerative and diseases. The complexes of hsp and antigenic peptides are accines for the treatment or prevention of neurodegenerative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of heat shock proteins (hsps) in association with antigenic
                                                                                                                                                                                                                                                                                                                                                                         Johansson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0253695P.
2000US-0251662P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
                                                                                                                                                                                                                                                                                                                                                                         4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       discordant helix; amyloid beta-peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Abeta) fragment (residues 1-40).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 162; DB 4;
Pred. No. 7.9e-18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       I-helix;
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The present invention relates to a method of identifying a compound stabilises an I-helical conformation of a discordant helix in a polypeptide, particularly amyloid beta-peptide (Abeta). The method

that

Sequence 40 AA;

Example 4;

Page

34;

55pp;

English.

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RESULT 55
AAE22990
ID AAE2290
XX AAE22
XX AAE22
XX AAE22
XX AAE22
XX Human
XX Human
XX Human
XX Human
XX Homo

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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              comprises providing a test sample comprising a polypeptide that contains a discordant helix in the form of an I-helix, contacting the test sample with a test compound and determining the rate of decrease in the amount of I-helix or the amount of I-helix present in the test sample. The method is useful for identifying a compound that stabilises an I-helical conformation of a discordant helix in a polypeptide. Such compounds are useful for decreasing the rate of formation of theta-strand structures between at least two discordant helix-containing polypeptides, and for treating amyloidogenic discorders such as amyloidosis in Alzheimer's disease, and prion diseases (e.g. scrapie, bovine spongiform encephalopathy (BSB), Creutzfeld-Jacob disease (CJD)). The present sequence represents human Abeta fragment (amino acid residues 1-40)
                                                                                                                                                                          The invention relates to a method for diagnosing Alzheimer's disease or identifying an individual at risk of the developing the disease. The method involves measuring abundance of low-density lipoprotein receptor related protein-1 (LRP-1), abundance of transcripts thereof, or LRP-1 receptor activity. The method is useful for treating neurodegenerative disorders such as dementia, depression, confusion, Creutzfeldt-Jakob
                                                                                         disease, Huntington's disease, Parkinson's disease, multiple sclerosis, loss of motor coordination, stroke and syncope. The present sequence is human amyloid-beta (A-beta) peptide used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAY-2000;
06-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dementia; LRP-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; low-density lipoprotein receptor related protein-1; depression; Alzheimer's disease; neurodegenerative disorder; Huntington's disease; Parkinson's disease; multiple sclerosis; Creutzfeldt-Jakob disease;
                                                                                                                                                                                                                                                                                                                                                                                                          Example;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Method for diagnosing Alzheimer's disease or identifying individual risk of developing disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-083127/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zlokovic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-NOV-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAE22990 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40
                                                                invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UYSC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                    Page 17; 46pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BV;
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2000US-0246268P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  confusion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (A-beta)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            stroke; amyloid-beta peptide; A-beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 162; DB 5;
Pred. No. 7.9e-18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
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Query Match
Best Local S
Matches 30
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Best Local Similarity
Matches 30; Conser
                                                       The invention relates to an isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta. The peptide may be conjugated to polymer molecule. Antibodies raised against the peptides are also included. The peptide is useful for inducing an immune response to amyloid beta peptides and amyloid deposites and therefore treating Alzheimer's disease. The antibody is useful for reducing the formation of amyloid fibrils and deposite. The peptide has a reduced ability to adopt a beta-sheet confirmation as an antigenic source, and a much lower risk of leading to any toxic effects in humans. The present sequence is a synthetic immunogenic but non-amyloidogenic peptide of the invention
                                                                                                                                                                                              Novel isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta, useful for inducing immune response to amyloid beta peptides and amyloid deposits.
                                                                                                                                                                                                                                                                                                                                                                                                                              Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amyloid beta; non-amyloidogenic peptide; vaccine; immunogen; Alzheimer's disease; amyloid fibril; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic immunogenic non-amyloidogenic peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAU11773
                                        Sequence
                                                                                                                                                                           Claim 1; Page 66; 69pp; English
                                                                                                                                                                                                                                         WPI; 2002-106186/14.
                                                                                                                                                                                                                                                            Frangione B,
                                                                                                                                                                                                                                                                                                     22-MAY-2000; 2000US-0205578P
                                                                                                                                                                                                                                                                                                                                                                  WO200190182-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                 (UYNY ) UNIV
                                                                                                                                                                                                                                                                                                                        22-MAY-2001; 2001WO-US016322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      بر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 DAEFRHDSGYEVHHQXLVFFAEDVGSNKGA 30
 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%;
larity 100.0%;
Conservative 0
100.0%; 8 llarity 100.0%; 1 Conservative 0;
                                                                                                                                                                                                                                                                                 NEW YORK STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                            Wisniewski T,
                                                                                                                                                                                                                                                                                                                                                                                  /note= "Optionally absent"
35 . 40
35 . 40
/label= Lys, Asp
/label= "Optionally absent. When present they form in
combination with residues 31-34, a C-terminal polylysine
or polyaspartate segment of 4-10 residues in length"
                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
31. .34
/label= Lys, Asp
/note= "Optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                            Sigurdsson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 162; DB 5;
Pred. No. 7.9e-18;
; Mismatches 0;
Score 162; DB 5;
Pred. No. 7.9e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                            ДМ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 40;
                   Length 40;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
0
 Gaps
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Query Match 100
Best Local Similarity 100
Matches 30; Conservative
                                                                                                                                                                                                                        The invention relates to an isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta. The peptide may be conjugated to polymer molecule. Antibodies raised against the peptides are also included. The peptide is useful for inducing an immune response to amyloid beta peptides and amyloid deposits and therefore treating Alzheimer's disease. The antibody is useful for reducing the formation of amyloid fibrils and deposits. The peptide has a reduced ability to adopt a beta sheet confirmation as an antigenic source, and a much lower risk of leading to any toxic effects in humans. The present sequence is a synthetic immunogenic but non-amyloidogenic peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated synthetic immunogenic but non-amyloidogenic peptide homologous to amyloid beta, useful for inducing immune response to amyloid beta peptides and amyloid deposits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Amyloid beta; non-amyloidogenic peptide; vaccine; immunogen; Alzheimer's disease; amyloid fibril; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic immunogenic non-amyloidogenic peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAU11772
                                                                                                                                                                                   Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 66; 69pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-106186/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Frangione B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYNY ) UNIV NEW YORK STATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2000; 2000US-0205578P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2001; 2001WO-US016322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-NOV-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2002
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                            DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                   AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wisniewski T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers

1. .6
/label= Lys, Asp
/note= "Optionally absent"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /label= Lys, Asp
/note= "Optionally absent or are all Lys or all Asp to
form, in combination with residues 1. .6, a polylysine
polyaspartate segment of 4-10 residues in length"
                                                                                                             .0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sigurdsson
                                                                                                             Score 162;
Pred. No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                       Mismatches
40
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                                                                                         DB 5;
.9e-18;
s 0;
                                                                                                                                      Length
                                                                                                                                         40;
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RESULT 58
AAG68313
ID AAG68
XX AAG68
XX
RESULT 59
AAU96895
ID AAU96
XX AAU96
XX AAU96
XX AU96
XX LT AU96
XX LT AU96
XX AU96
XX
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes medicinal compositions (I) inhibiting beta-amyloid production comprising an active component a substance that inhibits the activity of cyclin-dependent kinase (CDK). Also described are: (1) a method for screening compounds for their ability to inhibit the production of beta-amyloid by contacting with beta-amyloid producing cells; and (2) screening kits. (I) have nootropic and neuroprotective activities. (I) suppress the phosphorylation of amyloid precursor protein (APP) which is an essential step in the production of beta-amyloid. (I) can be used in the treatment and prevention of neurodegenerative diseases such as dementia and Alzheimer's disease. The present sequence represents the A beta 1-40 amino acid sequence which is used in an example from the
                                                                                   Human; amyloid beta; cell death; neuron death; Alzheimer's disease; nootropic; neuroprotective; apoptotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Medicinal compositions for the treatment of dementia and Alzheimer's disease, comprise compounds that suppress beta amyloid production.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Suzuki T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-APR-2001; 2001WO-JP003555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-NOV-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human beta amyloid related amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAG68313;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAG68313 standard; peptide; 40
    Homo sapiens
                                                                                                                                                                                                                        Human
                                                                                                                                                                                                                                                                                                                27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                   AAU96895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU96895 standard; peptide; 40
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(SUZU/) SUZUKI
                                                                                                                                                                                                                    self-associating Amyloid beta 1-40 peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Watanabe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 162; DB 5; 100.0%; Pred. No. 7.9e-18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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particle form having an activity of inducing cell death in nervous system cells at a protein concentration of not higher than 1 micro g/ml. Also cincluded are (1) a method for the preparation of a solution containing a cell-associating type amyloid beta protein having high toxicity including a step of convecting aqueous solution containing the amyloid beta protein and a step of fractionating the solution containing the self-associating type amyloid beta protein in the convected aqueous solution; (2) a reagent containing the above self-associating type amyloid beta protein; (3) a method for inducing cell death in nervous system cells by using the above self-associating type amyloid beta protein; (4) a method for convected agreement a method for corporation of a drug having inhibiting activity on neuron death; a substance having an inhibiting activity on neuron death; a substance containing the above substance as the active component. The drug is used for preventing and/or treating Alzheimer's disease. The present sequence is a human amyloid beta 1-40 peptide used in an example demonstrating preparation of the particle of the invention
                                          Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A self-associating type amyloid beta protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-458303/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP2002105099-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 9; 14pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-2000; 2000JP-00295577
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                                          A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      relates to a self-associating type amyloid beta protein of
Length
    40;
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밁
                 S
                                     Matches
                                              Query Match
Best Local Similarity
                                      30;
         DAEFRHDSGYEVHHQKLVFFABDVGSNKGA 30
 DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA
                                     100.0%; ilarity 100.0%; Conservative
                                      0
                                    Score 162; DB 5; I
Pred. No. 7.9e-18;
 30
                                      Indels
                                      <u>,,</u>
                                      Gaps
                                       0;
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RESULT 60
AAM50909
Beta amyloid protein; beta/A4; amyloidosis; Alzheimer's disease; amyloid deposition; human; animal model.
                                                                         US6340783-B1
                                                                                                                            Beta amyloid protein amino acid residues 1-40.
                                                                                                                                             07-MAY-2002
                                                          22-JAN-2002.
                                                                                                                                                                          AAM50909 standard;
                                           03-OCT-1996;
                                                                                        Bapiens
                                                                                                                                            (first
                                            96US-00723661
                                                                                                                                                                         protein; 40
                                                                                                                                            entry)
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23-SEP-1992; 23-OCT-1992; 05-JUN-1995;

92US-00950417. 92US-00969734. 95US-00461216.

(UNIW) UNIV WASHINGTON

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RESULT 61
AAUBUING
ID AAUBU
XX AAUBU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence is that of a protein comprising amino acids 1-40 of CC beta amyloid protein (or beta/A4). The invention provides a method for CC producing a rodent (especially rat) model of Alzheimer's disease, which ci involves infusing a proteoglycan and a beta-amyloid protein into the CC allow co-deposition, and detecting the amyloid deposit in the brain CC tissue using staining techniques (Congo Red or thioflavin S) for CC fibrillar amyloid. The beta amyloid protein is preferably comprised of 39 cr 43 amino acids. The persent peptide has the ability to self-aggregate CC and fold into a specific beta-pleated sheet. This can be observed using CC ongo Red staining. Inhibition of staining indicates that an inhibitor CC assay for selecting a candidate therapeutic for inhibition fibrillar accordary structure of the amyloid protein. In an in vivo CC assay for selecting a candidate therapeutic for inhibiting fibrillar anyloid deposition/persistence in the brain, the candidate reagent is CC administered to a rodent in an infusate comprising beta/A4 peptide and CC perlecan by continuous infusion for at least 1 week into the hippocampus. CC infusate diminishes Congo Red and thioflavin S staining indicative of congophilic and fibrillar beta/A4 amyloid deposition in the brain if the CC congophilic and fibrillar beta/A4 amyloid deposition in the brain if the CC congophilic and fibrillar beta/A4 amyloid deposition in the brain if the CC constitute of the candidate reagent is used to study the process of amyloidosis that occurs in CC hipding peptides) that may be used for the treatment of Alzheimer's and cc other amyloidosis diseases
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Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                        Amyloid beta; Alzheimer's disease; 1
Down's syndrome; apolipoprotein E4;
thioflavin; polycyclic compound.
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                                                              24-AUG-2000;
                                                                                                                         24-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAU80186 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; larity 100.0%; Conservative 0;
                                                                  2000US-0227601P
                                                                                                                         2001WO-US026427.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     residues 1-40
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Pred. No. 7.9e-18;
); Mismatches 0;
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A
                                                                                                                                                                                                                                                                                                                                                                                                             familial Alzheimer's disease;
nootropic; neuroprotective;
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                                                                                                                                      27-NOV-2000;
29-NOV-2000;
20-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to amyloid binding polycyclic derivatives especially thioflavin derivatives. The full structures of the compounds are given in the specification. Also included are methods for making the compounds; compositions for in vivo imaging of amyloid deposits compounds and an in vivo method for detecting anyloid deposits. The compounds show a KD for binding to Amyloid beta 1-40 peptide of 0.0001 to 10maM. The compounds are useful for in vivo imaging of amyloid deposits. The compounds are also useful for treating Alzheimer's disease, familial Alzheimer's disease, Down's syndrome and conditions associated with apolipoprotein E4 alleles. The present sequence is the amyloid beta 1-40 peptide used to test the compounds of
                                                                                                                                                                                                                                                                                                     Human; amyloidogenic protein; Alzheimer's disease; Huntington's disease; spongiform encephalopathy; familial amyloid cardiomyopathy; amyloidosis; Gerstmann-Straussler-Scheinker syndrome; spongiform encephalopathy; GSS; Creutzfeldt-Jacob disease; insulinoma; diabetes; body myocytis; myeloma; CJ; beta-amyloid; mutant; mutein.
                                                                                                                                                                                        27-NOV-2001; 2001WO-US044581.
                                                                                                                                                                                                                                        WO200242462-A2
                                                                                                                                                                                                                                                                 Homo sapid
                                                                                                                                                                                                                                                                                                                                                                                Human beta-amyloid peptide
                                                                                                                                                                                                                                                                                                                                                                                                        14-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAE26332;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAE26332 standard; peptide; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40
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                                                                                                                                                                                                                                                                               sapiens.
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30; Conser
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                                                                                                               PRAECIS PHARM
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                                                                                       Israel DI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 162; DB 5; ilarity 100.0%; Pred. No. 7.9e-18; Conservative 0; Mismatches 0;
                                                                                                                                      2000US-0253302P.
2000US-0250198P.
2000US-0257186P.
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                                                                                                                                                                                                                                                                                                                                                                                 mutant (Abeta residues 1-40).
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                                                                                       Gosselin
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Novel therapeutic agent useful for treating an amyloidogenic disorder, e.g. Alzheimer's disease, comprises an immunoglobulin heavy chain constant region linked to a peptide capable of binding amyloidogenic protein.

Claim 18; Page; 79pp; English

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RESULT 63
AAM51863
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound comprising an immunoglobulin (Ig) heavy chain constant region or its fragment that retains the ability to bind an Fc receptor linked by a linker group or a direct bond to a peptide capable of binding an amyloidogenic protein. The invention is useful for clearing an amyloidogenic protein such as beta-amyloid, transthyretin (TTR), prion protein (FrP), islet amyloid polypeptide (IAPP), atrial natriuretic factor (ANP), kappa light chain, lambda light chain, amyloid A, procalcitonin, cystatin C, beta2-microglobulin, ApoA-I, gelsolin, calcitonin, fibrinogen, Huntington, alpha-synuclein and lysozyme from a subject and for treating an amyloidogenic disorder such
                                   Screening method for identifying comprises culturing the cells, exassociating Beta amyloid protein, the drug on cell death.
                                                                                                                                                                                                                                                           09-MAR-2000; 2000JP-00064984
                                                                                                                                                                                                                                                                                                                                          JP2001255318-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JAN-2002
                                                                                                                                                                                                                     09-MAR-2000; 2000JP-00064984
                                                                                                                                                                                                                                                                                                    21-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                        Human; amyloid beta; neurone death inhibition; Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human amyloid beta protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM51863 standard;
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                                                                                                                                          WPI; 2002-003272/01.
                                                                                                                                                                               (MITU ) MITSUBISHI CHEM CORP
                                                                                                                                                                                                                                                                                                                                                                                  sapiens.
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                                                    method for identifying drugs which inhibit neuron cell death
culturing the cells, exposing to high concentrations of self
ng Beta amyloid protein, and assessing the inhibitory action of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein;
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100.0%; Pative 0;
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Pred. No. 7.9e-18;
; Mismatches 0;
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Example; Page 7; 11pp; Japanese

Query Match Best Local Similarity

100.0%;

Score Pred.

162; No. 7.

DB 6; .9e-18;

Length 40

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RESULT 64
ABU08710
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                            The invention describes a method of screening a DNA controlling the production of amyloid protein (Abeta) by transferring a DNA library into a cell line with enhancement of expression of a selection marker gene in promoting the Abeta production from a precursor protein (betaApp) fragment of Abeta, then identifying a DNA clone for transferring into a cell to enhance Abeta production. The methods are useful for screening genes that control production of amyloid beta. The genes, encoded protein and related DNA materials are useful in the diagnosis and development of drugs for Alzheimer's disease. This is the amino acid sequence of amyloid beta protein fragment
                                                                                                                                                                                                                                                     Screening diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a method of screening drugs that exhibit inhibitory action on neurone death, involving culturing neuronal cells, exposing them to a self-associating type amyloid beta protein of high toxicity, and assessing if the sample has had an inhibitory action on neurone death when the cell death of said nervous system cells or nervous system organs is inhibited. The method is used for screening a drug having inhibitory action on neurone death, which can then be used to treat Alzheimer's disease. The present sequence is the human amyloid beta
Sequence
                                                                                                                                                                                                                   Disclosure; Page 101; 115pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                       (TAKE ) TAKEDA CHEM IND LTD.
(NICH-) JAPAN SEC CHUBU NAT HOSPITAL.
(KOMA/) KOMANO H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-2002; 2002WO-JP000836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amyloid beta; Abeta; anyloid beta A; gene therapy; alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amlyoid beta
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                                                                                                                                                                                                                                                                                                                                         Komano H;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified.
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 40
                                                                                                                                                                                                                                                     gene controlling production of amyloid Beta, applicable of and developing drugs for Alzheimer's disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nootropic; neuroprotective;
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RESULT 66
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ABUUSDO 65
ABUUSDO 65
ABUUSDO 67
AC ABUUS
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XX IS-FF
PR 16-FF
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PR 16-FF
XX HPI;
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                                                                                                                                                                                                                                                                                                                                               The invention relates to a measurement of the full length beta-amyloid (Abeta) peptide level of a specific Abeta peptide in a sample containing multiple types of Abeta peptide, by capturing and binding one terminus of the types of Abeta peptide, by capturing and binding one terminus of the types of Abeta peptides with a first antibody. The specific Abeta peptide is captured and bound at an opposite non-overlapping terminus with a second peptide. The invention is used for measuring full length Abeta peptide level useful for tracking the progression of Alzheimer's disease. The new method uses one specific antibody that recognises the N-terminus of all the Abeta peptides and a panel of detection antibodies that distinguish each Abeta peptide (Abeta 1-43, 1-42, 1-40 and 1-39) by their sequence difference at the C-terminus. This use of N and C-terminus specific antibodies allows simultaneous quantification of several Abeta peptides in a single assay. The present sequence is that of Abeta (1-40), used to raise the N and C-terminal antibodies of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enabling measurement of full length beta-amyloid peptide level for tracking progression of Alzheimer's disease, comprises capturing binding terminus of beta-amyloid peptide with antibodies.
                                                                                                                                                                                                                                                                                            Sequence 40
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16-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amyloid beta peptide (1-40).
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                        standard;
                                                                                                                              DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA
                                                                                                                                                                                                            100.0%; ilarity 100.0%; Conservative (
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2001US-00784854.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               beta peptide (1-40); Alzheimer's disease; antigen; Abeta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             peptide;
                     peptide;
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                        40
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                                                                                                                                                                                                            Score 162; DB 6;
Pred. No. 7.9e-18;
; Mismatches 0;
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                                                                                                                                                                                                                                                  Length 40;
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ABP96147
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Best Local S
Matches 30
              numan; Abeta40; amyloid toxicity inhibition; amyloid; integrin subunit; integrin; laminin; nootropic; neuroprotective; antidiabetic; antiparkinsonian; gene therapy; amyloidogenic protein; prion infection; amyloidogenic protein toxicity inhibition; amyloidogenic disease; Alzheimer's disease; type II diabetes; Parkinson's disease; amyloidorie.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method of identifying compounds that modulate the generation of one or more metabolites associated with a disease or disorder comprising determining levels of a cellular component protein or a conformation state of a cellular precursor protein. In precursor protein (APP), which is associated with Alzheimer's disease. It is also useful for identifying compounds as drugs for treating diseases or disorders associated with metabolic and/or proteolytic pathways. e.g. Alzheimer's disease, Parkinson's disease, Huntington's disease, lysosomal storage disorders, prion diseases, the tau-based neurodegenerative disorders, and other non-AD amyloidoses. The present sequence is an immunogenic portion of human APP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Identifying compounds that modulates the generation of metabolites associated with a disease or disorder, for treating e.g. Alzheimer disease by determining levels of a cellular component protein, or conformation state.
                                                                                                                                                                       Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 40 AA;
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                                                                                                                                                                                                                                                                                                 ABP96147 standard;
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                                                                                                                                                                     Abeta40 amino acid sequence SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ch 100.
l Similarity 100.
30; Conservative
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                                                                                                                                                                                                                                                                                              peptide;
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                                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 162; DB 6;
Pred. No. 7.9e-18;
Mismatches 0;
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ARESULT 68
AAE35429
ID AAE35
XX AE35
XX AE35
XX ADeta
XX All-D
KW Cerebb
KW Cerebb
KW Crohn
KW Chrohn
KW Ulcer
KW Hodgk
KW ulcer
XX Unide
XX Wisc.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or the formation of an amyloid deposit. The method comprises administering a dosage of one or more agent(s) that bind(s) to a molecule selected from an integrin subunit such as alpha5, alpha4 or betal, an integrin such as alpha2betal, alpha6betal or alphavbetal, and laminin, under conditions such that the agent(s) inhibit amyloid toxicity or the formation of an amyloid deposit. Amyloids have nootropic, neuroprotective, antidiabetic and antiparkinsonian activities, and can be used in gene therapy. The method is useful for inhibiting amyloidogenic protein toxicity, inhibiting the formation of an amyloidogenic protein toxicity, inhibiting the formation of an amyloidogenic protein toxicity, inhibiting the formation of an amyloidogenic protein deposit and/or treating amyloidogenic disease, such as Alzheimer's disease, type II diabetes, Parkinson's disease, such as Alzheimer's syndrome. The present sequence represents a human Abeta peptide designated Abeta40, which is given in the exemplification of the present
                                                                                      All-D-amyloid-beta peptide; Alzheimer's disease; rheumatoid arthritis; cerebral amyloid angiopath; amyloid disease; ankylosing spondylitis; psoriasis; Reiter's syndrome; Adult Still's disease; Bechet's syndrome; Crohn's disease; infection; leprosy; tuberculosis; carcinoma; nootropic; chronic pyelonephritis; osteomyelitis; Whipple's disease; vasotropic; Hodgkin's lymphoma; neuroprotective; bronchiectasis; ophthalmological; ulcer; antiinflammatory; cytostatic; uropathic; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       comprises administering
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                             17-JUN-2003
                                                                                                                                                                                                                                                                                                                   AAE35429;
                                                                                                                                                                                                                                                                                                                                                  AAE35429 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inhibiting amyloid toxicity or the formation of an amyloid deposit, comprises administering an agent that binds to an integrin, integrin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prenner IG, Wright S,
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17-DEC-2001; 2001US-0341772P
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 Misc-difference 1.
                                                       Unidentified
                                                                                                                                                                                                                                       Abeta protein #2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention describes a method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                              DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA
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                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                  protein;
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Pred. No. 7.9
0; Mismatches
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.9e-18;
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RESULT 69
ABP60626
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Allheimer's and other amyloid related disease e.g. cerebral amyloid angiopathy; for altering serum levels of amyloid-beta in a mammal and favours the clearance of soluble amyloid-beta or fibril amyloid-beta from the mammal; and reducing or inhibiting the formation of plaques. It is also used for treating AA (reactive) amyloid diseases including inflammatory diseases e.g. rheumatoid arthritis, juvenile chronic arthritis, ankylosing spondylitis, psoriasis, psoriatic arthropathy, Reiter's syndrome, Adult Still's disease, Bechet's syndrome and Crohn's disease. AA deposits are also produced as a result of chronic microbial infections (preferably leprosy, tuberculosis, bronchiectasis, decubitus ulcers, chronic pyelonephritis, osteomyelitis and Mhipple's disease). Certain malignant neoplasms can also result in AA fibril amyloid deposits
                                                                                                        Homo
                                                                                                                                    Human; A-beta; Alzheimer's disease; pre-amyloid deposit; magnetic resonance imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   including Hodgkin's lymphoma, renal carcinoma, carcinomas of gut, lung and urogenital tract, basal cell carcinoma and hairy cell leukaemia. The present sequence is an Abeta protein used to illustrate the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a method for prevention and/or treatment of an amyloid-related disease which comprises administration of an all-D - amyloid-beta peptide. The method is used for preventing and/or treating amyloid-beta peptide.
                                                                                                                                                                                    Human A-beta peptide
                                                                                                                                                                                                                    27-MAR-2003
                                                                                                                                                                                                                                                                                 ABP60626 standard; peptide; 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Prevention and/or treatment of an amyloid-related disease e.g. Alzheimer's disease, comprises use of all-D-amyloid-beta peptides.
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Pred. No. 7.9e-18;
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23-MAY-2002; 2002WO-US016057.

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Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a novel method for diagnosing Alzheimer's disease in vivo by injecting a labeled A-beta peptide, its functional derivative, fragment, variant, analogue or chemical derivative, into a patient to be diagnosed, and imaging pre-amyloid deposits and plaque using magnetic resonance imaging. The methods of the invention are useful for diagnosing Alzheimer's disease and for monitoring amyloid clearing. The peptides are useful for imaging pre-amyloid deposits and Congo-red positive amyloid plaques. The present sequence represents a A-beta peptide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diagnosing Alzheimer's disease in vivo comprises injecting beta peptide, into a patient to be diagnosed, and imaging I deposits and plaque using magnetic resonance imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amyloid precursor protein; A-beta peptide; angiogenesis; psoriasis; angiogenesis-mediated disease; cancer; arthritis; atherosclerosis; macular degeneration; diabetic retinopathy; Alzheimer's disease; cerebral amyloid angiopathy; cerebrovascular disease; brain injury.
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                                                                                                Inhibiting angiogenesis, and preventing or alleviating the symptoms of an angiogenesis-mediated disease, e.g. cancer, arthritis or atherosclerosis, comprises increasing in vivo concentrations of an A-beta peptide in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               standard;
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                                                                                                                                                                                                                                                                 Mullan
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llarity 100.0%;
Conservative (
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                                                                                                                                                                                                                                                                                                                      FLORIDA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        entry)
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Pred. No. 7.9e-18;
Mismatches 0;
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pre-amyloid
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Claim

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38;

85pp;

English

The present sequence is that of a novel immunogenic but non-deposit forming polypeptide derived from amino acid residues 1-30 of amyloibeta (1-42) protein (see also ABR42769). The novel polypeptide maint

Disclosure;

Page 214; 265pp;

English.

New synthetic immunogenic but non-deposit forming peptides, useful inducing an immune response to prions, amyloids, amylin or amylin fibrils, particularly for treating e.g. Alzheimer's, scrapie or Creutzfeldt-Jacob disease.

for

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RESULT 71
ABR42775
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Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence represents a peptide derived from amyloid precurs protein, and designated A-bertal-40 peptide. A-beta peptides are used if the method of the invention. The specification describes a method of inhibiting angiogenesis, and preventing or alleviating the symptoms of angiogenesis-mediated disease in a patient. The method comprises increasing in vivo concentrations of an A-beta peptide within the patient. The A-beta peptides are useful for preventing or alleviating angiogenesis-mediated diseases such as cancer, arthritis, atherosclerosis, psoriasis, macular degeneration and diabetic retinopathy. A-beta peptide antagonists may be used to treat Alzheimer disease, cerebral amyloid angiopathy cerebral disease in the presence of Alzheimer's disease, or traumatic brain injury
                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABR42775 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 40
                                                                                                                                                                                          21-NOV-2001;
                                                                                                                                                                                                                21-NOV-2002;
                                                                                                                                                                                                                                                              WO2003045128-A2.
                                                                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                   Amyloid beta;
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                                                                                                                                                                     VINU ( YNYU)
                                                                                                                                                                                                                                                                                                                                                                                                                        neuroprotective;
                                                                                                                          2003-505145/47.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         beta-derived immunogenic polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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ilarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first
                                                                                                                                               Wisniewski
                                                                                                                                                                                                                                                                                                                                                                                                                                  amyloidosis;
                                                                                                                                                                                                                                                                                           present as Lys or Asp to form, in combination with residues 7-10, an N-terminal polylysine or polyaspartate segment of 4-10 residues"
                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                   /note= "optional C-terminal amide"
                                                                                                                                                                                                                                                                                                                                                                                                                        immunogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                       Alzheimer's disease; nootropic; vaccine; human; mutant; mutein
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                                                                                                                                               Sigurdsson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 162;
Pred. No. 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide derived from amyloid
                                                                                                                                               EM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6;
.9e-18;
e 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
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e used in
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RESULT 72
ABR42776
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Best Local :
The present sequence is that of a novel immunogenic but non-deposit forming polypeptide derived from amino acid residues 1-30 of amyloid beta (1-42) protein (see also ABR42769). The novel polypeptide maintains the 2 major immunogenic sites of amyloid beta peptide. It is used, alone or conjugated to an immunostimulant in an immunizing composition, to induce an immune response to amyloid beta peptides. The immunizing composition is used in a claimed method of reducing amyloidosis. Antibodies directed against the peptide can be used in passive immunization. The use of non-fibrillar/non-toxic amyloid beta peptides i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the C-terminus to further preserve antigenicity. The polypeptide, or conjugated to an immunostimulant in an immunizing composition, used to induce an immune response to amyloid beta peptides. The immunizing composition is used in a claimed method of reducing amyloidosis. Antibodies directed against the peptide can be used passive immunization. The use of non-fibrillar/non-toxic amyloid peptides is a safer vaccination approach for humans
                                                                                                                                                                                                                                                                                         New synthetic immunogenic but non-deposit forming peptides, useful inducing an immune response to prions, amyloids, amylin or amylin fibrils, particularly for treating e.g. Alzheimer's, scrapie or Creutzfeldt-Jacob disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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                                                                                                                                                                                                                                               Disclosure;
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the C-terminus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wisniewski
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                                                                                                                                                                                                                                               215;
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Pred. No. 7.9e-18;
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Best Local
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of amyloid fibrils or plaques without causing neurotoxicity. The method comprises administering an inactivation effective amount of an amyloid peptide-inactivating enzyme to a mammal. The strategy is to hydrolyse the amyloid beta (Abeta) peptides before they form amyloid plaques using the zinc metallopeptidase insulin degrading enzyme (IDE), insulysin or neprelysin. The methods and enzymes are useful for treating (e.g peptide therapy) Alzheimer's disease. The enzymes are useful for inducing the synthesis of endogenous amyloid inactivating enzymes, such as insulysin
                                                                                                                                                                                                            Hersh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  amyloid
insulin
                                                                                                                                        Preventing formation or growth of amyloid fibrils or plaques without causing neurotoxicity, useful for treating Alzheimer's disease, comprises administering an amyloid peptide inactivating enzyme.
                                                                                                                                                                                       WPI;
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                                                                                             The invention discloses a method for preventing the formation
                                                                                                                  Claim 5; Fig
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degrading enzyme; IDE; insulysin; neprelysin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease; nootropic; neuroprotective
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Pred. No. 7.9e-18;
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The present invention describes a method for the treatment or amelioration of symptoms of an amyloid-beta peptide (Abeta)-related disorder, which involves the administration of an adenosine triphosphate (APP) dependent enzyme activity modulator or APP modulator (A). (A) has nootropic and neuroprotective activities. The method is used for treating or ameliorating a symptom of an Abeta-related disorder e.g. Alzheimer's disease in a subject e.g. human, who is at risk for familial form of Alzheimer's disease. (A) can also be used for the treatment of senile dementia, Down's syndrome, inclusion body myositis, memory loss, mild cognitive impairment, cognitive decline, severe cognitive impairment and personality changes that result in loss of functional ability. The present sequence represents a human beta-amyloid precursor protein (APP) amino acid sequence of residues 597 to 636, corresponding to Abeta 1-40, which is given in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treatment or amelioration of symptom of amyloid-beta peptide-related disorder e.g. Alzheimer's disease comprises administration of an adenosine triphosphate (ATP)-dependent enzymatic activity modulator or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               amyloid-beta peptide related disorder; Abeta-related disorder; adenosine triphosphate dependent enzyme activity modulator; ATP-dependent enzyme activity modulator; ATP modulator; nootropic; neuroprotective; Alzheimer's disease; senile dementia; Down's syndrinclusion body myositis; memory loss; mild cognitive impairment; cognitive decline; severe cognitive impairment; personality change;
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he Abetal-40 peptide
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Pred. No. 7.9
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7.9e-18;
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                                                                                                                                                             This invention relates to a novel method of treating Alzheimer's disease and comprises contacting a neuronal cell with a composition comprising at least one compound that reduces membrane depolarisation of neuronal cells caused by aggregated beta-amyloid protein degredation products. The compounds of the invention may have nootropic or neuroprotective activities. Beta-amyloid peptides are neurotropic or neuroprotective cause neuronal cell dysfunction and cell loss characteristic of Alzheimer's disease. Identification of the cytotoxic mechanisms involving beta-amyloid peptides may provide a method of desiging compounds capable of antagonising the effects of aggregation of beta-amyloid peptides and developing treatments for Alzheimer's disease. The present sequence is that of a human beta-amyloid peptide related to the invention which was used as a model peptide for investigating the role of beta-amyloid peptides on calcium homeostasis in neuronal cells.
                                                                                                                 Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating Alzheimer's composition comprisi
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18-JAN-2002; 2002US-00051663.
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neuronal cell dysfunction; neuronal cell loss; cytotoxic mechanism;
beta-amyloid peptide aggregation; calcium homeostasis; human; Abeta1-40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alzheimer's disease; neuronal cell; membrane
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) BLANCHARD B
) STOCKWELL B
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100.0%; bu
100.0%; P;
100.0%; P;
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ng compound
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    comprises contacting 
and reducing membrane
      Score 162; DB 7;
Pred. No. 7.9e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. 7. 
; Mismatches
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s 0;
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                                                           Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       neuronal cell with depolarization of
         Indels
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            0;
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RESULT 77
ADC66001
ID ADC66
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AC ADC66
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AC ADC66
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AAE38648
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                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a method of determining the rate of biosynthesis or breakdown of at least one inaccessible biological molecule in a subject. The method is useful for diagnosis or monitoring and treatment of diseases associated with an altered rate of biosynthesis/breakdown of an isotopically labelled precursor molecule, specifically osteoporosis; left-ventricular hypertrophy; liver cirrhosis or fibrosis; congestive heart failure; scleroderma; coal-miner's pneumoconiosis; cardiac or lung
                                                                                                                                                                                                                                                                                                                                                                         fibrosis; Alzheimer's disease; multiple sclerosis; rheumatoid arthritis; diabetes mellitus; muscle-wasting syndromes; muscular dystrophy; athletitraining and cancer. The method is also useful for screening candidate
                 18-DEC-2003
                                                                                                                                                                                                                                                                                   Sequence 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 105; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 administering labeled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Determining rate of biosynthesis or breakdown of inaccessible biological molecules, useful e.g. for diagnosis or monitoring treatment, by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hellerstein MK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003068919-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 coal-miner's pneumoconiosis; muscle-wasting syndrome; diabetes melliturheumatoid arthritis; Alzheimer's disease; muscular dystrophy; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; therapy; osteoporosis; left-ventricular hypertrophy; scleroderma; liver cirrhosis; congestive heart failure; multiple sclerosis; fibrosis;
                                                                             ADC66001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-689661/65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-FEB-2003; 2003WO-US004183.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-DEC-2003
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                                                                                                                                                                                                                                                                                                               r protein targets, phenotypic/human validation studies on potential drug mechanism studies and determining the risk of developing the drug mechanism studies and determining the risk of developing the . The present sequence is human amyloid-beta peptide. This ce is used to illustrate the method of the invention
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                                                                                                                                                                                DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                            standard;
                                                                                                                                                        DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                  100.0%; ilarity 100.0%; Conservative
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                                                                                                                                                                                                                  Score 162; DB 7
Pred. No. 7.9e-1
; Mismatches
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RESULT 78
ADC35182
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Best Local
                                                                                                                                                                                                 Beta-amyloid peptide; Abetal-40; Alzheimer's disease; neuronal cell; membrane depolarisation; aggregated beta-amyloid; Abeta; calcium inf. secretase inhibitor; tyrosine kinase inhibitor; chloride channel antagonist; dopamine receptor antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for screening compounds that inhibit production of amyloid beta protein or its salt using XB31 alpha/beta, X11L, APPbeta or XB51 (ADC65991-ADC66000). The compound is useful in a pharmaceutical and composite or its salt. The pharmaceutical is used as therapeutic agent for treating Alzheimer's disease. The present sequence was used to illustrate the invention.
                       03-NOV-2000; 2000US-00706574
                                                   18-JAN-2002; 2002US-00051663
                                                                              19-JUN-2003.
                                                                                                       US2003114510-A1
                                                                                                                                 Synthetic
                                                                                                                                                          neuroprotective.
                                                                                                                                                                      chloride channel antagonist; dopamine receptor antagonist;
alpha-adrenergic receptor antagonist; lead compound;
neuronal membrane depolarisation; Abeta aggregate; nootropic;
                                                                                                                                                                                                                                                                   Beta-amyloid peptide Abetal-40.
                                                                                                                                                                                                                                                                                                                        ADC35182;
                                                                                                                                                                                                                                                                                                                                                  ADC35182 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Screening of compound that inhibits production its salt used in pharmaceutical for preventing involves using alpha or beta XB31.
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(SUZU/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; amyloid beta protein; XB31 alpha; XB31 beta; Alzheimer's disease;
X11L; APPbeta; XB51; A(beta)40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human A (beta) 40.
                                                                                                                                                                                                                                                                                               18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; ilarity 100.0%; Conservative 0
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                                                                                                                                                                                                                                                                                              entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 162; DB 7;
Pred. No. 7.9e-18;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of amyloid beta protein Alzheimer's disease,
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(INGR/) INGRAM V M.

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RESULT 7)
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ADPES
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ADPE
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ACC ADP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method for treating Alzheimer's disease comprising contacting a neuronal cell with a pharmaceutical composition comprising compound(s) that decreases membrane depolarisation of neuronal cells caused by aggregated beta-amyloid (Abeta) protein degradation products. The invention also relates to a pharmaceutical composition composition compound(s) that decreases membrane depolarisation of neuronal cells, compound(s) that decreases calcium influx of neuronal cells, and a secretase inhibitor, treating a subject having a condition characterised by neuronal membrane depolarisation comprising administering a composition comprising a tyrosine kinase inhibitor, a chloride channel composition comprising a tyrosine kinase inhibitor, a chloride channel composition comprising a tyrosine kinase inhibitor, a chloride channel composition antagonist, and identifying lead compounds for a pharmacological antagonist, and identifying lead compounds for a pharmacological conditions associated with increased neuronal depolarisation induced by the presence of Abeta aggregates. The method is used for treating Alzheimer's disease and conditions characterised by neuronal membrane depolarisation and for identifying lead compounds for pharmacological antagonist. This sequence represents a beta-amyloid peptide of the invention.
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Best Local :
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                                                                                                                                                                                                  24-FEB-2000;
26-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amyloid plaque; neurotoxicity; amyloid peptide Alzheimer's disease; human; A beta 1-40.
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                           WPI; 2003-898030/82
                                                                                                                                                                                                                                                                                       03-JUN-2002; 2002US-00159279
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A beta 1-40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
30; Conserv
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STOCKWELL
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2001US-00792079.
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Pred. No. 7.9e-18;
; Mismatches 0;
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Best Local S
Matches 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Preventing formation or growth of amyloid plaques without causing neurotoxicity, useful for treating Alzheimer's disease, by generating vector comprising a DNA sequence encoding at least one amyloid peptide
                                                                                                                                                                                                                                                  Sequence 40 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 12; 36pp; English.
  ADK82702
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                                                                                                                       1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                       l Similarity 30; Conser
standard; peptide; 40
                                                                                             DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                       100.0%; Score 162; DB 7; llarity 100.0%; Pred. No. 7.9e-18; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     enzyme.
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RESULT 80
ADX82702
ID ADX82702
XX ADX82
XX Final O6-MA
XX Final O6
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immunocell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Beta-amyloid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-JUL-2001; 2001CN-00120278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-JUL-2001; 2001CN-00120278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CN1396183-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADK82702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (/NAHZ)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZHANG X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #8 recognised by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antibody to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      senile dementia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    fibre;
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Query Match Best Local Similarity Matches 30; Conserv

100.0%; Score 162; DB 7; Larity 100.0%; Pred. No. 7.9e-18; Conservative 0; Mismatches 0;

Length 40;

Indels

0;

Gaps

0

Sequence 40 AA;

The invention relates to a human fusion antibody for preventing and treating senile dementia. The antibody recognises and binds the beta-amyloid peptide and the fibres generated by it. The human antibody Pc segment recognized by human immunocells are sequentially contained by terminals from N to C. The fusion gene coding for the antibody is also disclosed. This sequence represents a beta-amyloid peptide recognised ly

recognised by

its

Claim 1; Page 2; 26pp; Chinese.

Human fusion antibody with senile dementia. WPI; 2003-442233/42.

antibody for reducing cerebral amyloid fibers associated

Zhang

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RESULT 81
ADF53270
ID ADF533270
ID ADF533270
AC ADF53
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RESULT 82
ADN00693
ID ADNO
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                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                 The invention relates to a method of screening for DNA which controls production of amyloid A(beta) protein, comprising transducing a DNA library which promotes the production of A(beta) protein from beta-amyloid precursor protein (APP) protein, into the cell strain, so that expression of selective-marker gene is enhanced, and identifying the transduced clone which enhances the production of A(beta). The method is useful for screening DNA that controls production of A(beta). The method is useful for screening DNA that control this expression, antibodies to the proteins, antisense nucleic acids and inhibitors of the proteins are useful for diagnosing and treating Alzheimer's disease. The antisense nucleic acids and inhibitors are also useful for treating neurodegenerative diseases such as Down's Syndrome, Parkinson's disease, amylotrophic lateral sclerosis, diabetic neuropathy, etc. This sequence corresponds to the amino acid sequence of the amyloid A(beta)40 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Screening of DNA controlling amyloid beta protein production by transducing DNA that promotes amyloid beta production from preciprotein, into cell, identifying transduced clone which enhances
  ADN00693 standard; protein; 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (KOKU-)
(KOMA/)
(TAKE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amyloid A(beta); beta-amyloid precursor protein; APP;
Alzheimer's disease; neurodegenerative disease; Down'
Parkinson's disease; amylotrophic lateral sclerosis;
                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 18; 48pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-2001;
01-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-2002; 2002JP-00223200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP2003289881-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amyloid A(beta)40 amino acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADF53270
                                                                                                                                                                                            30;
                                                                                                                                                  μ.
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                                                                                                                                                                                          h 100.0%; ; Similarity 100.0%; ; 30; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KOKURITSU RYOYOJO CHUBU BYOINCHO.
KOMANO H.
TAKEDA CHEM IND LTD.
                                                                                                                                DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                40 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                          DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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2002JP-00025878.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein;
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                                                                                                                                                                                       Score 162; DB 8;
Pred. No. 7.9e-18;
; Mismatches 0;
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                                                                                                                                                                                              Indels
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               composition is useful for preventing or treating a disease or condition characterized by the presence of amyloid deposits, e.g. Alzheimer's disease. The present sequence is an amyloid peptide, which forms an amyloid peptide aggregate which produces a conformational epitope, and was used to illustrate the invention.
    09-OCT-2003; 2003WO-US032080
                                              22-APR-2004.
                                                                                      WO2004032868-A2
                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to an antigenic composition conconformational epitope of a protofibrillar aggregate which fuman or animal and contributes to amyloid fibril formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New composition comprising a conformational epitope of a protofibrillar aggregate, useful for preventing or treating a disease or condition characterized by the presence of amyloid deposits, e.g. Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Neuroprotective; Vaccine; conformational epitope; protofibrillar aggregate; amyloid fibril; amyloid Alzheimer's disease; amyloid peptide; A40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A40,
                                                                                                                                                                          Alzheimer's disease;
                                                                                                                                                                                                                Amino acid sequence of beta-amyloid peptide (1-40) variant G37A.
                                                                                                                                                                                                                                                          15-JUL-2004
                                                                                                                                                                                                                                                                                                    ADN41885;
                                                                                                                                                                                                                                                                                                                                            ADN41885 standard; peptide; 40 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
llarity 100.0%;
Conservative 0
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                                                                                                                                                                                                                                                            (first
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                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                      amyloid beta peptide; Down's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82pp;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 162; DB 8;
Pred. No. 7.9e-18;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
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                                                                                                                                                                        syndrome; antibody
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RESULT 84
ADN41881
ID ADN41
AC ADN41
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Best Local :
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                                                                                                                                                                                                                                                           09-OCT-2002;
13-FEB-2003;
12-APR-2003;
20-JUN-2003;
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13-FEB-2003;
22-APR-2003;
20-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The specification describes a method for treating Alzheimer's disease. The method comprises administering to a subject a pharmaceutical composition comprising an antibody that binds preferentially to amino acids 28-40 of beta-amyloid peptide (1-40). The method is useful for diagnosing, treating or preventing diseases associated with expression of amyloid-beta peptide, such as Alzheimer's disease or Down's syndrome. The present sequence represents a beta-amyloid peptide (1-40) variant, with the change G37A. It was used to test antibodies of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Treating or preventing diseases associated with expression of amyloid-beta peptide, e.g. Alzheimer's disease or Down's syndrome, comprises administering an amount of an antibody directed against amyloid-beta
Treating or preventing diseases associated with expression of amyloid-
beta peptide, e.g. Alzheimer's disease or Down's syndrome, comprises
administering an amount of an antibody directed against amyloid-beta
                                                                                                          WPI; 2004-340802/31.
                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amino
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                                                                                                                                                                                                          (RINA-) RINAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  acid sequence
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                                                                                                                                                                                                                                                           ; 2002US-0417232P.
; 2003US-0447611P.
; 2003US-0464754P.
; 2003US-0480353P.
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Conservative 0;
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2003US-0447611P.
2003US-0464754P.
2003US-0480353P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                          NEUROSCIENCE CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Levkowitz
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                                                                                                                                                       Levkowitz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of beta-amyloid peptide (1-40) variant V39A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         amyloid beta peptide; Down's syndrome; antibody
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                                                      The specification describes a method for treating Alzheimer's disease. The method comprises administering to a subject a pharmaceutical composition comprising an antibody that binds preferentially to amino acids 28-40 of beta-amyloid peptide (1-40). The method is useful for diagnosing, treating or preventing diseases associated with expression of amyloid-beta peptide, such as Alzheimer's disease or Down's syndrome. The present sequence represents a beta-amyloid peptide (1-40) variant, with the change V40A. It was used to test antibodies of the invention.
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beta peptide, e.g. Alzheimer's disease or Down's syndrome, comprises
administering an amount of an antibody directed against amyloid-beta
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13-FEB-2003; 2003US-0447611.
22-APR-2003; 2003US-0464754P.
20-JUN-2003; 2003US-0480353P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alzheimer's disease; amyloid beta peptide; Down's syndrome; antibody.
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beta peptide, e.g. Alzheimer's disease or Down's syndrome, comprises
administering an amount of an antibody directed against amyloid-beta
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                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                       Alzheimer's disease;
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beta peptide, e.g. Alzheimer's disease or Down's syndrome, comprises
administering an amount of an antibody directed against amyloid-beta
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            describes a method for treating Alzheimer's disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide;
                                                                                                                                                                                                                                                                              of beta-amyloid peptide (1-40)
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Pred. No. 7.9e-18;
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22-APR-2003;
20-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The specification describes a method for treating Alzheimer's disease. The method comprises administering to a subject a pharmaceutical composition comprising an antibody that binds preferentially to amino acids 28-40 of beta-amyloid peptide (1-40). The method is useful for diagnosing, treating or preventing diseases associated with expression amyloid-beta peptide, such as Alzheimer's disease or Down's syndrome. T present sequence represents a beta-amyloid peptide (1-40) variant, with the change G38A. It was used to test antibodies of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     beta peptide, e.g. Alzhe
administering an amount
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                                                                                                                                                       01-NOV-2002;
                                                                                                                                                                               31-OCT-2003;
                                                                                                                                                                                                                                                                                                                         Human beta-amyloid protein (Abeta 1-40) SEQ ID
                                                                                                                                                                                                                                                                                                                                                 12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                ADO10000 standard; protein;
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                                                                                                                                                                                                                             WO2004041779-A2
                                                                                                                                                                                                                                                                           amyloid plaque induction; sulphated glycosaminoglycan;
low fibrillar Abeta 1-40; LrAbetar, human; beta-amyloid
Abeta 1-40; Alzheimer's disease; Parkinson's disease.
                                                                                   2004-440491/41.
                                                                                                                                                                                                                                                    sapiens.
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                                                                                                                                 PROTEOTECH
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                                   of amyloid plaques useful for screening and identification of use compounds involves immobilizing sulfated glycosaminoglycan or ed macromolecule on medium followed by adding dissolved low
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e, e.g. Alzheimer's disease or Down's syndrome, comprises
ng an amount of an antibody directed against amyloid-beta
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2003US-0464754P.
2003US-0480353P.
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                                                                                                           Sanders
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Pred. No. 7.9e-18;
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Disclosure;

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Matches 30
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The present sequence is that of a human amyloid-beta peptide corresponding to amino acid residues 672-711 of the amyloid-beta precursor protein 770. The peptide was used in an example from the invention in which its binding to various forms of apolipoprotein E (apoE) was evaluated. High affinity binding was demonstrated, suggestin that apoE may be useful as an amyloid-beta binding compound for therapeutic purposes. A claimed method of treating a patient suffering from an amyloid-beta in a body fluid of the patient. The binding complex formed between the compound and amyloid-beta is excreted from the patient. The amyloid disease is especially Alzheimer's disease. Suitable compounds include apoE2, apoE3 and apoE4. Another claimed method of treating an amyloid-beta. The method uses a membrane, filter or column comprising a bound compound (e.g. apoE) that binds amyloid-beta. The
                                                                                                                                                                                                                                                                                                  Treating patient suffering from amyloid disease e.g. Alzheimer's comporises administering to a patient in need of such treatment, a compound capable of binding to free amyloid beta in body fluid of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; amyloid-beta; amyloid neuroprotective; nootropic.
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                                                                                                                                                                                                                                                                                       patient.
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larity 100.0%; Pred. No. 7.:
Conservative 0; Mismatches
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smatches 0;
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The present invention describes compositions (C) comprising: (a) a first agent (a1) that prevents or treats amyloid-beta related disease; and (b) a second agent (a2) that is: (i) a peptide or peptidomimetic that modulates amyloid-beta fibril formation or induces a prophylactic or therapeutic immune response against amyloid-beta fibril formation; or (ii) an immune system modulator that prevents or inhibits amyloid-beta fibril formation. Also described is a kit comprising (C). (C) have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mild-to-moderate cognitive impairment; vascular dementia; cerebral amyloid angiopathy; hereditary cerebral haemorrhage; senile dementia; bown's syndrome; inclusion body myositis; age-related macular degeneration; hypothyroidism; cerebrovascular disease; cardiovascular disease; memory loss; anxiety; behavioural dysfunction; neurological condition; psychological condition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neuroprotective; cerebroprotective; haemostatic; ophthalmological; antithyroid; vasotropic; cardiovascular; tranquilliser; uropathic; anticonvulsant; anti-HIV; antiparkinsonian; muscular; neuroleptic; cardiant; antidepressant; endocrine; hypnotic; antidepressant; endocrine; hypnotic; amyloid-beta fibril formation modulator; immune system modulator;
                                                                                                                                                   Composition for treating e.g. Alzheimer's disease comprises first agent that prevents or treats amyloid-beta related disease and second agent that is either a peptide or peptidomimetic or an immune system modulato:
                                                                                                                                                                                                                                                                                                          24-DEC-2002;
23-JUN-2003;
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amyloid-beta fibril formation; immune response;
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                                                                                                                        Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vaccine
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                                                                                                                                                                                                                                              Bellini F;
                                                                                                                      Page 67; 143pp;
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ilarity 100.0%;
Conservative
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2003US-0482214P.
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Pred. No. 7.9e-18;
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                                                                                                                                                     d agent modulator
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RESULT 92
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Matches
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                                                                                                                                                                                                                           Alzheimer's Disease; AD; occular tissue; lens; amyloidogenic disorder; Creutzfeld-Jakob disease; spongiform encephalopathy; Prion disease; scrapie; bovine spongiform encephalopathy; veterinary prionopath; parkinson's disease; Huntington's disease; trinucleotide repeat disease; amyotrophic lateral sclerosis; Down's Syndrome; Pick's Disease; Frontotemporal Dementia; Lewy Body Disease; Hallervorden-Spatz Disease; synucleinopathy; multiple system atrophy; neuronal intranuclear inclusion disease; tauopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ophthalmological, antithyroid, vasotropic, cardiovascular, tranquilliser, urogathic, anticonvulsant, anti-HIV, antiparkinsonian, muscular, neuroleptic, cardiant, antidepressant, endocrine and hypnotic activities, and can be used as amyloid-beta fibril formation modulators, and as immune system modulators. (C) can be used for preventing or treating an amyloid-beta related disease e.g. Alheeimer's disease (including sporadic (non-hereditary) or familial (hereditary)), mild cognitive impairment, mild-to-moderate cognitive impairment, vascular dementia, cerebral amyloid angiopathy, hereditary cerebral haemorrhage, senile dementia,
                                                                                                                                                                                        progressive supranuclear palsy; corticobasal degeneration; human;
amyloid-beta; Abeta.
                                                                                                                                                                                                                                                                                                                                                                                                             Human Abeta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR16410 standard;
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                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nootropic, neuroprotective,
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                                                                                                                                                                                                                                                                                                                                                                                                             (amyloid-beta) 1-40 peptide.
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ilarity 100.0%;
Conservative 0
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Pred. No. 7.9e-18;
); Mismatches 0;
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21-AUG-2000; 2000US-0226590P 18-NOV-2003; 2003US-00715776. US2004152068-A1

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ADS18445
ID ADS18
XX ADS18
XX ADS18
XX ADS18
XX ADS18
XX APYlc
XX Amylc
XX Meurc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a method for diagnosing or providing a prognosis CC regarding the state of Alzheimer's Disease (AD) in a mammal. The method CC involves contacting an ocular tissue with a detectably-labelled compound to the ocular tissue compared to the normal control level of CC compound to the ocular tissue compared to the normal control level of CC disorder e.g. Familial AD. Sporadic AD. Creutzfeld-Jakob disease, spongiform encephalopathies, prion disease, variant CC cincluding scrapie, bovine spongiform encephalopathies, prion disease (CC including scrapie, bovine spongiform encephalopathy and other veterinary CC prionopathies), Parkinson's disease, Huntington's disease (and CC syndrome (Trisomy 21), Pick's Disease, Huntington's disease, Down's CC syndrome (Trisomy 21), Pick's Disease (Frontotemporal Dementia), Lewy CC disease, neurodegeneration with brain iron accumulation (CC disease, multiple system atrophy, dementia with Lewy Bodies, and others), neuronal intranuclear inclusion disease, tauopathies (including corpressive supranuclear palsy, Pick's disease, corticobasal corpressive supranuclear palsy, Pick's disease, tauopathies (including corpressive supranuclear palsy, Pick's disease, tauopathies (including corpressive supranuclear palsy, Pick's disease, tauopathies (including corpressive supranuclear palsy, Pick's disease, corticobasal complex). The present sequence is the human amyloid-beta (Abeta) corporation, hereditary frontotemporal dementia with or without corporation. The present sequence is the human amyloid-beta (Abeta) corporation complex). The present sequence is the human amyloid-beta (Abeta) corporation complex).
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Matches 30
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21-AUG-2001;
25-APR-2002;
18-NOV-2002;
05-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Method for diagnosing Alzheimer's disease in a mammal invan ocular tissue with a detectably-labeled compound that amyloid protein or use of magnetic resonance imaging.
                                                                                                                       Neuroprotective; nootropic; gene therapy; Alzheimer's disease; amyloid-beta; amyloid-beta chaperone; alpha-chymotrypsin; apolipoprotein E; Abetal-40.
    14-OCT-2004
                                                                                                                                                                                                                                                   30-DEC-2004
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                                           WO2004087733-A2
                                                                                                                                                                                                         Amyloid-beta
                                                                                                                                                                                                                                                                                                                              ADS18445 standard; peptide;
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30; Conserv
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2001US-00935126.
2002US-00132779.
2002US-0427153P.
2003US-0452336P.
                                                                                                                                                                                                       inhibitor peptide Abetal-40,
                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                      RW Alzheimer's disease; Down's syndrome; Huntington's disease;

RW glutaminyl cyclase inhibitor; OC inhibitor; notropic; neuroprotective;

RW antiparkinsonian; neuroleptic; antipyretic; antidepressant; hypotensive;

RW hypnotic; CNS-Gen; anticonvulsant; antialcoholic; antiaddictive;

RW hypnotic; CNS-Gen; endocrine-Gen; tranquiliser; antialchitic;

RW antiantlammatory; antipsoriatic; antirheumatic; antiatrhitic;

RW antison's disease; Huntington's chorea; pathogenic psychotic condition;

RW Barkinson's disease; Huntington's chorea; pathogenic psychotic condition;

RW markinson's disease; Huntington's chorea; pathogenic psychotic condition;

RW homeostatic regulation; energy metabolism; auconomic function;

RW homeostatic regulation; energy metabolism; auconomic function;

RW hormonal balance; body fluid regulation; hypertension; fever;

RW sleep dysregulation, anorexia; anxiety related disorder; depression;

RW sleep dysregulation, anorexia; anxiety related disorder; depression;

RW melignant metastasis; psoriasis; rheumatoid arthritis; atherosclerosis;

RW malignant metastasis; psoriasis; rheumatoid arthritis; atherosclerosis;

RW leukocyte adhesion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADU24434 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               glutaminyl cyclase (QC) inhibitor-related protein #2.
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100.0%; Pred. No. 7.9e-18;
Live 0; Mismatches 0;
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Matches 30
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                                                                                                   Amyloid beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
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Amyloid-beta peptide (1-40); glutaminyl cyclase; nootropic; neuroprotective; anticonvulsant; antiulcer; cytostatic; neu
                                                                                                                                                                                                                                                                                                         ADU46708 standard; peptide; 40
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(NIES/)
(HEIS/)
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NIESTROJ A J.
HEISER U.
BUCHHOLZ M.
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                                                                                                   peptide (1-40),
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                                                                                               substrate of glutaminyl cyclase
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Pred. No. 7.9e-18;
Mismatches 0;
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RESULT 96 ADV50991

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CC enzyme a target in drug development. The invention relates to the cidentification, screening and use of effectors of QC for the preparation CC of a medicament for: (a) the treatment of diseases that can be treated by condulation of QC activity in vivo; and/or (b) the modulation of CC physiological processes based on the action of pGlu-containing peptides CC caused by modulation of QC activity. The QC effectors are used to alter CC the conversion of N-terminal Glu or Gln residues to pGlu residues to alter CC Alzheimer's disease, Down Syndrome, Huntington's disease, Levent disease, Down Syndrome, Huntington's disease, Kennedy's CC disease, ulcer disease and gastric cancer without Helicobacter CC pylori infections, pathogenic psychotic conditions, schizophrenia, CC impaired humoral and cell-mediated immune responses, cancer, malign CC metastasis, melanoma, psoriasis, rheumatoid arthritis, atherosclerosis, CC impaired humoral and cell-mediated immune responses, leukocyte adhesion CC makefulness, impaired homeostatic regulation of energy metabolism, impaired autonomic function, impaired hormonal balance and impaired CC regulation of body fluids. The effectors of QC are also useful for: cregulating and/or controlling male fertility; stimulating and for CC differentiating acid-producing parietal cells and histamine secreting CC enterochromatefin-like cells (all claimed). Amyloid beta peptides were also shown to be substrates of dipeptidyl peptidase IV (DP IV) and DP IV-like enzymes, and preferered effector compositions additionally comprise cc inhibitors of these enzymes.
                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              amyloid beta peptides. The invention shows that glutaminyl cyclase (QC, EC 2.3.2.5) is involved in the cyclisation of Glu to pGlu, making this enzyme a target in drug development. The invention relates to the identification
                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is that of amyloid beta peptide (1-40). Pyroglutamate (pGlu)-containing isoforms of amyloid beta peptides represent the prominent forms of N-truncated amyloid beta peptides senile plaques. The pGlu modification exacerbates the toxic propert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAY-2003; 2003US-0468014P.
05-MAY-2003; 2003US-0468043P.
15-OCT-2003; 2003US-0512038P.
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bitors of these
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                                                                                                       Similarity
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                                                           Score 162; DB o;
Pred. No. 7.9e-18;
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                                                                                                                                        Length 40;
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IS 13-UJ
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel method for comprehensive identification of a beta amyloid-binding protein, which is expressed in the brain and has a capacity to bind with beta amyloid 40. The method comprises performing a proteomic technique. The method of the invention neuroprotective and nootropic applications. The method of the invention may be useful in screening for a compound which inhibits the interaction between beta amyloid and a beta amyloid-binding protein. The beta amyloid binding protein may be useful as an effective agent against Alzheimers disease. The current sequence is that of the beta amyloid 40 peptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Comprehensive identification of beta amyloid binding protein expressed brain, for use against Alzheimer's disease, comprises performing a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beta amyloid; neuroprotective; nootropic; Alzheimers disease; degeneration; neurological disease.
                                                                                                                                                        Human beta amyloid peptide,
                                                                                                                                                                                      07-APR-2005
                                                                                                                                                                                                                                            ADW38388 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example; Page; 26pp; Japanese.
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               02-JUL-2004; 2004US-00884729
                                        13-JAN-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 40
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                                                                                                                             antiaggregant; beta-amyloid
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Pred. No. 7.9e-18;
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72249
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                                                                                                                                                                                                                                                                                                                                                            amyloid, Alzheimers disease, Parkinsons disease, Creurzfeldt Jakob disease, antiparkinsonian, neucerebroprotective.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AHNJ/)
(JOII/)
(KUMON/)
(KIMC/)
                           RNA aptamers capable of inhibiting amyloid fiber formation, useful treating or preventing disease caused by accumulation, production or proliferation of amyloid fibers such as Alzheimer's disease and Parkinson's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                    N-terminal amyloid beta protein (1-40) Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 40 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New beta-amyloid aggregation inhibiting protein, useful for treating neurodegenerative disorders, such as Alzheimer's disease or Down's
                                                                                                                                                                                                                                                                                        Key
Modified-site
                                                                                                                                                                                                                                                                                                                                  Unidentified.
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 Disclosure; SEQ ID NO
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                                                                                                                                                         28-AUG-2003; 2003JP-00304195
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JO I.
KWON H J.
KIM C J.
PARK J E.
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Pred. No. 7.9e-18;
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Length 40; Indels

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RESULT ADVENTED BY A COLOR OF THE BY A COLOR OF 
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Best Local
The invention describes a preventive and therapeutic agent (I) of an Alzheimer's disease, mild cognitive impairment or brain amyloid angiopathy, comprising a monoclonal antibody (Al) reacting specifically with a partial peptide in the C terminal of beta-amyloid or its derivative(s), where Al does not recognize the partial peptide of beta-amyloid comprising a 11 amino acid sequence (SEQ ID No. 8) fully defined in the specification. (Al) is useful for manufacturing the preventive-therapeutic agent (I) which is administered in order to prevent and treated the specification of the second of the second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligos, vectors comprising such DNA oligos and pharmaceutical compositions containing the RNA aptamers or the vectors aforementioned. Accordingly, the RNA aptamers or encoding vectors are useful for treating or preventing a disease caused by the accumulation, production or proliferation of amyloid fiber including Alzheimer's disease, Parkinson's disease and prion diseases such as BSE and Creutzfeldt Jakob disease. Furthermore, these pharmaceutical compositions exhibit antiparkinsonian, neuroprotective, nootropic and cerebroprotective activities. This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention relates to RNA molecules that are capable of inhibiting amyloid fiber formation. Specifically, it refers to any one of 15 fully defined 88, 89 or 90 RNA nucleotide aptamers given in the specification or sequence variants thereof. The present invention describes DNA cligos
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Preventive and therapeutic agent useful for treating and preventing Alzheimer's disease, mild cognitive impairment, or brain amyloid angiopathy, comprises antibody capable of reacting with partial pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-SEP-2003; 2003JP-00317443
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Pred. No. 7.9e-18;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alzheimer's disease, mild cognitive impairment or brain amyloid angiopathy. (I) is useful as diagnostic agent for Alzheimer's disease. (I) is capable of removing beta-amyloid from a formed senile plaque. (I) is capable of removing beta-amyloid in the brain. (I) arrests beta-inhibits aggregation of beta-amyloid in the brain. (I) arrests beta-amyloid at the periphery region. (I) does not induce bleeding from the
                                                                                                                                                                                           New composition with isolated monoclonal antibodies binding a conformational epitope of a prefibrillar aggregate contributing amyloid fibril formation, useful in diagnosing or treating Alzhdisease or other amyloid diseases.
                                                                                                                                                                                                                                                                                                    Glabe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Monoclonal antibody; vaccine; amyloid protein; diagnosis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amyloid at the periphery region. (I) does not induce bleeding from th cerebral blood vessel. This is the amino acid sequence of human beta-amyloid residues 1-38.
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Pred. No. 7.9e-18;
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The invention relates to a composition comprising an isolated monoclonal antibody which binds to a conformational epitope of a prefibrillar aggregate which forms in a human or animal contributing to amyloid fibril formation, the monoclonal antibody being specific for a conformation-dependent epitope that is preferentially displayed by oligomeric conformations of Abeta and other amyloids. Also included are a preparation comprising at least one monoclonal antibody cited in the composition cited above in combination with at least one anti-inflammatory agent, a composition (comprising a monoclonal antibody which inflammatory agent, a composition (comprising a monoclonal antibody which

fibril

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antibody which s in a human or

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CC fibril is substantially free of the epitope), a preparation comprising at CC least one monoclonal antibody in the composition in combination with at C camyloid deposits in a human or animal subject comprising causing a disease or condition with at C amyloid deposits in a human or animal subject comprising causing a disease or condition with an C campressing at C camyloid fibril forms in a human or animal subject comprising causing a disease or condition with amyloid deposits in a human or animal contributing to fibril contributing to fissue comprising causing a monoclonal antibody to bind to an epitope of CC an antibody to general contributing to fissue comprising causing a monoclonal antibody to bind to an epitope of CC an amyloid fibril formation where the amyloid fibril is substantially correctly formation of amyloid fibril is substantially correctly formation of amyloid deposits in the central nervous system of a human or animal contributing to correctly formation of amyloid deposits in the central nervous system of a human or animal subject, and C treating or preventing Alzheimer's Disease and/or another amyloid disease c which causes brain inflammation in a human or animal subject, and C treating or preventing to the subject a monoclonal antibody composition cited cabve, and administering to the subject an anti-inflammatory agent to biochemistry, particularly for producing monoclonal antibody composition cited conformational epitopes of a prefibrilar aggregate which contribute to antibodies in the immunization of humans against highest with contribute to antibodies in the immunization of humans against highest and protein cother amyloid disease, including early onet hizhestmer's disease or cother amyloid disease, including early onet hizhestmer's disease or cother amyloid disease, including early onet hizhestmer's disease or cother amyloid disease, fluntington's disease, amyloidosis, hereditary Icelandic camyloidosis, serum amyloidosis, British familial dementia, Danish cother protein, in this case amy
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US-08-609-090-6
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US-08-61-847A-1
US-08-861-847A-1
US-09-861-847A-1
US-09-861-847A-1
US-09-861-847A-1
US-09-861-847A-1
US-09-861-948-1
US-09-623-548A-975
US-09-623-548A-975
US-09-657-276-1002
US-09-657-276-1002
US-09-657-276-1002
US-08-986-988-2
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US-08-302-808-2
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US-08-304-988-3
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US-08-268-348A-4
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US-08-268-348A-4
US-08-268-348A-1
US-09-724-551-4
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COUNTRY: USA

ZIP: 22314

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
COMPUTER READABLE
COMPUTER IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PC-DOS/MS-DOS
SOFTWARE: PACENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/609,090
FILING DATE: 29-FEB-1996
CLASSIFICATION NUMBER: 330
ATTORNEY/AGENT INFORMATION:
NAME: KRAUS, ETIC J
REFERENCE/DOCKET NUMBER: 34.4059
TELECOMMUNICATION INFORMATION:
TELEFIANC TO 3-684-1111
TELEFAX: 703-684-1124
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 30 amino acids
TYPE: maino acids
TYPE: paptide
US-08-609-090-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: HENSLEY, ASSESSED APPLICANT: BUTTERFIELD, D. A.
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: ACKNEY, John M.
APPLICANT: AKSENOV, Michael
TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF
TITLE OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSEE: LOWE PRICE LEBLANC & BECKER
STREET: 99 Canal Center Plaza, Suite 300
CITY: Alexandria
STRATE: Virginia
COUNTRY: USA
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US-09-861-847A-1
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US-08-609-090-3
Sequence 1, Application US/09861847A
PATCHI NO. 6733450
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGNIEWSKI, THOMAS
APPLICANTION: RESPONSE TO AMYLOID BETA FOR INDUCTION OF AN IMMUNE
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA AND AMYLOID DEPOSITS
FILE REFERENCE: 5986/1K433-US1
CURRENT FILING DATE: 2001-05-22
PRIOR APPLICATION NUMBER: 60/016,233
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Best Local (
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    Application US/08609090
    5840838

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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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l Similarity 100.0%; F
30; Conservative 0;
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Pred. No. 6.2e-19;
Mismatches 0;
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
ODERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/609,090
FILING DATE: 29-FEB-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Kraus, Eric J.
REFERENCS/DOCKET NUMBER: 434-059
TELECOMMUNICATION INFORMATION:
TELEFAX: 703-684-1111
TELEFAX: 703-684-1124
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 33 amino acids
TYPE: maino acids
TYPE: peptide
US-08-699-090-4
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US-08-609-090-4
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Best Local S
Matches 30
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NUMBER OF SEQ ID NOS: 15
SOFTWARE: PatentIn version 3.0
SEQ ID NO 1
                                                                               Query Match DB 1, Best Local Similarity 100.0%; Score 162; DB 1; Best Local Similarity 100.0%; Pred No. 6.9e-19; Matches 30; Conservative 0; Mismatches 0;
                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY ITTLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY INTELLOR INVENTED: A PROCESS FOR ENHANCING THE ACTIVITY INTELLOR INVENTED: 11

CORRESPONDENCE ADDRESS:
ADDRESSE: LOWE PRICE LEBLANC & BECKER
STREET: 99 Canal Center Plaza, Suite 300

CITY: Alexandria
STATE: Virginia
COUNTRY: USA
ZIP: 22114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 30
TYPE: PRT
ORGANISM: Artificial
FEATURB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: HENSLEY, Kenneth
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: CARNEY, John M.
APPLICANT: AKSENOV, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4, Application US/08609090
o. 5840838
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                         1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                             Length 33;
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APPLICANT: HENSLEY, ACHIVICAL APPLICANT: BUTTERFIELD, D. A.
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: CARNEY, John M.
APPLICANT: AKSEMOV, Michael
ITITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: LOWE PRICE LEBLANC & BECKER
STREET: 99 Canal Center Plaza, Suite 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 612-305-1228
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 35 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                        Sequence 6 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No. 5721106
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                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 110.00010120
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/304,585
FILING DATE: 12-SEP-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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APPLICANT: Mantyh, Patrick W.

TITLE OF INVENTION: LABELLED BETA-AMYLOID PEPTIDE AND
TITLE OF INVENTION: METHODS FOR USE IN DETECTING ALZHEIMER'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQUENCES: 1: CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 612-305-1228
                                                            COUNTRY: UZIP: 22314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                                                        6, Application US/08609090
5. 5840838
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                                                                           Virginia
Y: USA
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P.O. Box 581415
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Pred. No. 7.4e-19;
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RESULT 7
US-09-861-847A-11
; Sequence 11, Application US/09861847A
; Patent No. 6713450
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                                                                                                                                                                                                                                                                                                                                                                                                                       SOPTWARE: PatentIn version 3.0 SEQ ID NO 6
                                                                                                                                                                                   Matches
                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, Rinar
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-AMYLOIDOGENIC PEPTIDES
TITLE OF INVENTION: HOMOLOGOUS TO AMYLOID BETA FOR INDUCTION OF AN IMMUNE
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA AND AMYLOID DEPOSITS
FILE REFERENCE: 5986/1K433-US1
CURRENT APPLICATION NUMBER: US/09/861,847A
CURRENT FILING DATE: 2001-05-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/609
FILING DATE: 29-FEB-1996
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Kraus, Exic J.
REGISTRATION NUMBER: 36,190
REFERENCE/DOCKET NUMBER: 434-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/016,233
PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: FRANGIONE, Blas
                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 36
TYPE: PRT
                                                                                                                                                                                                                                                                         NAME/KEY: misc feature OTHER INFORMATTON: C-terminal residue 36 may be amidated.
                                                                                                                                                                                                                                                                                                              FEATURE:
OTHER INFORMATION: Synthetic FEATURE:
                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6, Application US/09861847A
o. 6713450
                                                                                                                                1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30; Conservative
                                                                                                         DAEFRHDSGYEVIHOKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           36 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                703-684-1124
                                                                                                                                                                               100.0%;
ilarity 100.0%;
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/08/609,090
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                                                                                                                                                                                                 Score 162; DB 2; Pred. No. 7.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 162; DB 1;
Pred. No. 7.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                 Mismatches
                                                                                                             36
                                                                                                                                                                                                                    Length 36;
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                                                                                                                                                                                   Indels
                                                                                                                                                                                   0,
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                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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; ORGANISM: Artificial ; FEATURE: OTHER INFORMATION: Synthetic US-09-861-847A-11
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US-08-302-808-1
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APPLICANT: WISNIEWSKI, Thomas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, EINAX
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-AMYLOIDOGENIC PEPTIDES
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA FOR INDUCTION OF AN IMMUNE
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA AND AMYLOID DEPOSITS
FILE REFERENCE: 5986/1K433-US1
CURRENT APPLICATION NUMBER: US/09/861,847A
CURRENT FILING DATE: 2001-05-22
PRIOR FILING DATE: 2000-05-22
PRIOR PRILING DATE: 2000-05-22
SOFTWARE: PACENTIN VORSION 3.0
SEQ ID NO 11
LENGTH: 36
TYPE: DEPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local :
                                                                     COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
COMPUTER: IBM COMPATIBLE
SOPTWARE: PastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/302,808
FILING DATE: 15-SEP-1994
CLASSIFICATION APPLICATION APPLICATION APPLICATION NUMBER: PCT/JP94/00089
FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 019035/1993
APPLICATION NUMBER: 28-085/1993
APPLICATION NUMBER: 34473/1993
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 34473/1993
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 34473/1993
FILING DATE: 28-DEC-1993
APPLICATION NUMBER: 34473/1993
ATTORNEY/AGENT INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION NUMBER: 34.235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
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APPLICANT: SUZUKI, No. 5750349uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
TITLE OF INVENTION: BATTIBODIES TO B-AMYLOIDS OR
TITLE OF INVENTION: DERIVATIVES AND USE THEREOF
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESSE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
STREET: 130 WATER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 02019
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 130 WAR.
CITY: BOSTON
STATE: MA
TOWNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , Application US/08302808
5750349
ON NUMBER: 34
     34,235
ER: 44631
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WOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
US-08-302-808-1
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US-07-737-371E-68
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TELEX: 200291 STRE
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 38 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                         US-07-737-371E-68
                                                                                                                                         TELEFAX: 617-542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 6
SEQUENCE CHARACTERISTICS:
LENGTH: 38 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                     ANDERSOR: FIRM A RICHARDOM, F.C.
STREET: 225 Franklin Street
CITY: BOSTON
STATE: MA
COUNTRY: US
ZIP: 03110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IEM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FRASESO FOR Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/737,371E
FILING DATE: 29-UUL-1991
CLASSIFICATION DATA:
APPLICATION NUMBER: 07/559,172
FILING DATE: 27-UUL-199
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 29.066
REFERENCE/DOCKET NUMBER: 00108/028002
TELECOMMUNICATION INFORMATION:
THE TELECOMMUNICATION INFORMATION:
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Best Local
Query March 100.0%; Score 162; DB 1;
Best Local Similarity 100.0%; Pred. No. 8.2e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Yankner, Bruce A.
TITLE OF INVENTION: NEUROTOXIN INHIBITORS (AS AMENDED)
NUMBER OF SEQUENCES: 77
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEPAX: 617-523-6440
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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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100.0%; Pred. No. 8.2e-19;
vative 0; Mismatches 0;
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                                                         Length 38;
   Indels
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   0;
   Gaps
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30

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                                                                                                                       ; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; FRAGMENT TYPE: N-terminal
; ORIGINAL SOURCE:
US-08-986-948-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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US-08-986-948-1
                                                      Matches
                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08986948
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILING LANGE OF THE PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/302

APPLICATION NUMBER: 15-5EP-1994

FOR APPLICATION NUMBER: 06/7/JJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: SUZUKI, No. 5955317uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
                                                                                                                                                                                                                                                                                              TELEX: 200291 STRE INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 44631
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 28-DEC-1993
ATTORNEY/AGENT INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION NUMBER: 34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ Version 1.5 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 01013
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 01903
FILING DATE: 05-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                    Local Similarity
                                                                                                                                                                                                                            TOPOLOGY:
                                                                                                                                                                                                                                          LENGTH: 38 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                   TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 2869 FILING DATE: 16-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 15-SEF
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/986,948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02019
DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                   617-523-6440
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                                                      Conservative
                                                                                                                                                                                                                             linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANTIBODIES TO B-AMYLOIDS OR DERIVATIVES AND USE THEREOF
                                                  100.0%; Score 162; DB 1; 100.0%; Pred. No. 8.2e-19; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sod
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                                                                                                                                                                                                                                                                                                                                                                                                                  34,235
                                                                                                                                                                                                                                                                                                                  1:
                                                                                    Length 38;
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                                                      Indels
                                                      0,
                                                      Gaps
                                                      0
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FILE REFERENCE: 2110

CURRENT APPLICATION NUMBER: US/09/623,548A

CURRENT FILLING DATE: 2000-09-05

PRIOR APPLICATION NUMBER: 60/134,406

PRIOR FILING DATE: 1999-05-17

PRIOR APPLICATION NUMBER: 60/153,406

PRIOR PILING DATE: 1999-09-10

PRIOR APPLICATION NUMBER: 60/159,783

PRIOR APPLICATION NUMBER: 60/159,783

PRIOR PILING DATE: 1999-10-18

NUMBER OF SEQ ID NOS: 1617

SOFTWARE: PATENTIN VET. 2.1

SEQ ID NO 1002

LENGTH: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 2110
CURRENT APPLICATION NUMBER: US/09/623,548A
CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-18
NUMBER OF SEQ ID NOS: 1617
SOFTWARE: PATEENTIN VET. 2.1
SEQ ID NO 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 11
US-09-623-548A-975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 975,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent No. 684971
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Best Local (
                                                                                                                                                                                                                                                                                           APPLICANT: Bridon, Dominique
APPLICANT: Ezrin, Alan
APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 38
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTIONS OF ENDOGENOUS THERAPEUTIC PEPTIDES PROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Conjuchem,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Conjuchem,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1002, Application US/09623548A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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Ezrin, Alan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Holmes, Darren
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 162; DB 2; llarity 100.0%; Pred. No. 8.2e-19; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dominique
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APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
APPLICANT: Holmes, Darren
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
FILE REFERENCE: 2110
CURRENT APPLICATION NUMBER: US/09/657,276
CURRENT APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR APPLICATION NUMBER: 60/153,783
PRIOR APPLICATION NUMBER: 60/153,783
PRIOR PILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/153,783
PRIOR FILING DATE: 1999-10-18
NUMBER OF SEQ ID NOS: 1617
SECTIMARE: PATENTIN VET: 2.1
SECTIMARE: PATENTIN VET: 2.1
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                                                                                                                                                                                                                                                                                                                       RESULT 14
US-09-657-276-1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic;
; OTHER INFORMATION: Peptide
US-09-657-276-975
GENERAL INFORMATION:
APPLICANT: Conjuchem, Inc.
APPLICANT: Bridon, Dominique
APPLICANT: Ezrin, Alan
APPLICANT: Milner, Peter
APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                      Sequence 1002, Application US/09657276
Patent No. 6887470
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 100.0%; Score 162; DB 2;
Best Local Similarity 100.0%; Pred, No. 8.2e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Conjuche
APPLICANT: Bridon,
APPLICANT: Ezrin, F
APPLICANT: Milner,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
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Similarity 100.0%;
30; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09657276
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Pred. No. 8.2e-19;
Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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FILE REFERENCE: 2110
CCURRENT APPLICATION NUMBER: US/09/657,276
CCURRENT APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/159,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-05-10
PRIOR PRICING DATE: 1999-10-18
PRIOR PRICING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
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S-08-302-808-2
S-08-302-808-2
Sequence 2, Application US/08302808
Patent No. 5750349
GENERAL INFORMATION:
APPLICANT: SIZUKI, No. 5750349uhiro
APPLICANT: CDAKA, Asano
APPLICANT: CDAKA, Asano
APPLICANT: CDAKA, ASANO
APPLICANT: CDAKA, ASANO
APPLICANT: COLORY
TITLE OF INVENTION: DERIVATIVES AND USE THEREOF
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS: 14
CORRESPONDENCE ADDRESS: 14
CORRESPONDENCE ADDRESS: 14
COUNTRY: BOSTON
STATE: MA
ZIP: O2019
COUNTRY: USA
ZIP: 02019
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTMARB: FASISSO Version 1.5
CURRENT APPLICATION DATA: 15-SEP-1994
CLASSIPICATION NUMBER: US/08/302,808
FILING DATE: 15-SEP-1994
APPLICATION NUMBER: 01032/1993
APPLICATION NUMBER: 01032/1993
APPLICATION NUMBER: 02-7AN-1993
APPLICATION NUMBER: 03-51993
APPLICATION NUMBER: 03-51993
APPLICATION NUMBER: 03-51993
APPLICATION NUMBER: 28-D80-1993
APPLICATION NUMBER: 34-73/1993
APPLICATION NUMBER: 34-7

TELEX: 200291 STRE INFORMATION FOR SEQ ID NO:

2

TELEFAX:

617-523-6440

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                                                                                                US-08-609-090-7
                                                Best
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                               Matches
                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: HENGLEY, Kenneth
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: CARNEY, John M.
APPLICANT: AKSENOV, Michael
TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF
TITLE OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES
                                                                                                                                                                                                           TELEFAX: 703-684-1124
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                   NAME: Kraus, Eric J.
REGISTRATION NUMBER: 36,190
REFERENCE/DOCKET NUMBER: 43:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FRAGMENT TYPE: 1
ORIGINAL SOURCE:
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TYPE: N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acids
TYPE: amino acid
                                                                                                            MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                           TELEPHONE: 703-684-1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 99 Canal CITY: Alexandria STATE: Virginia
                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/08/609,090 FILING DATE: 29-FEB-1996 CLASSIFICATION: 530
                                              Local Similarity
                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                          STRANDEDNESS:
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                               30;
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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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99 Canal Center Plaza, Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                              100.0%; ilarity 100.0%; Conservative
                                                                                                                             ss: single
linear
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Pred. No. 8.5e-19;
                               Score 162; DB 1;
Pred. No. 8.5e-19;
); Mismatches 0;
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                                                             Length 39;
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                                 Indels
                               0;
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                               Gaps
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RESULT 18
US-08-986-948-2
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GENERAL INFORM
APPLICANT:
                                                                                                                                               Patent No.
                                                                                                                                                            Sequence 2,
                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/682,245A
FILING DATE: 17-UL-1996
CLASSIPICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/039,414
FILING DATE: 16-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAME: LENTZ, NELSEN L
                                                                                                                                                                                                                                                                                                                                                            Query Match
             GENERAL INFORMATION:
APPLICANT: SUZUKI, NO. 5955317uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
TITLE OF INVENTION: ANTISODIES TO B-AMYLOIDS OR
TITLE OF INVENTION: DEFIVATIVES AND USE THEREOF
NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 513-948-7961
TELEX: 214320
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: A METHOD OF DETERMINING THE DEGREE TITLE OF INVENTION: AGGREGATION OF THE BA4 PEPTIDE NUMBER OF SEQUENCES: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: HOECHST MARION ROUSSEL, I
STREET: 2110 E. GALBRAITH RD., P.O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 38,537
REFERENCE/DOCKET NUMBER: HR
TELECOMMUNICATION INFORMATION:
TELEPHONE: 513-948-7369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: PAUL, JOSEPH I
APPLICANT: RIEDEL, NORBEI
APPLICANT: SAHASRABUDHE,
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: amino acid STRANDEDNESS: TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 513-948-7361 OR 4681
                                                                                                                                                                                                                                                                                                                                              TOCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: U.S.A. ZIP: 45215-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: CINCINNATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
                                                                                                                                                                                                                                                                                 1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                        DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
                                                                                                                                                              Application US/08986948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OHIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08682245A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       39 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GOYAL, SHEFALI
PAUL, JOSEPH W
RIEDEL, NORBERT G
                                                                                                                                                                                                                                                                                                                             100.0%; Score 162; DB 1; llarity 100.0%; Pred. No. 8.5e-19; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                       protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HR-1257A
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BOX 156300
                                                                                                                                                                                                                                                                                                                                                                Length 39;
                                                     THEIR
                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                 0,
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MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-termin
ORIGINAL SOURCE:
US-08-986-948-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION NUMBER: 08/302,808
APPLICATION NUMBER: 08/302,808
FILING DATE: 15-SEP-1994
APPLICATION NUMBER: 0101132/1993
FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 25-JAN-1993
FILING DATE: 25-JAN-1993
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 286985/1993
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 234773/1993
APPLICATION NUMBER: 34773/1993
APPLICATION NUMBER: 34773/1993
APPLICATION NUMBER: 34.235
REGISTRATION NUMBER: 34.235
REGISTRATION NUMBER: 34.235
REGISTRATION NUMBER: 44631
TELEPHONE: 617-523-6440
TELEPAX: 617-523-6440
TELEPAX: 617-523-6440
TELEPAX: 200291 STRE
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 39 amino acide
TYPE: amino acide
STRANDEDNESS: 61916
TOPOLOGY: linear
TOPOLOGY: linear
TOPOLOGY: linear
TOPOLOGY: linear
TOPOLOGY: linear
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                RESULT 19
US-07-744-767A-1
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                    Sequence 1, Application US/07744767A

Patent No. 5434050

GENERAL INFORMATION:
APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.

TITLE OF INVENTION: for Use in Detecting Alzheimer's Disease
NUMBER OF SEQUENCES: 3

CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman, Lundberg & Woessner, P.A.

STREET: 3500 IDS Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION NUMBER: US/08/986,948
FILING DATE:
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MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: DI
STREET: 130 W
CITY: BOSTON
STATE: MA
          STREET: 3500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30;
                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 162; DB 1; Length 39; ilarity 100.0%; Pred. No. 8.5e-19; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-terminal
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; INFORMATION FOR SEQ ID NO: 1; SEQUENCE CHARACTERISTICS: LENGTH: 40 amino acide TYPE: amino acide TYPE: amino acide TYPE: 1000LOGY: linear MOLECULE TYPE: peptide US-07-744-767A-1
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PACEDITIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/235,400
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Gaylo, Paul J.
NAME: Gaylo, Paul J.
REGISTRATION NUMBER: X-9507
REGISTRATION NUMBER: X-9507
TELEPHONE: (317) 276-3861
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
TWODE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      윰
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application Patent No. 5552426 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/744,767A
FILING DATE: 13-AUG-1991
CTARSTETTATION: APPLICATION TO A DATE: 13-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAMB: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 600
TBLECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lunn, William H.
APPLICANT: Monn, James A.
APPLICANT: Zimmerman, Dennis M.
APPLICANT: Zimmerman, Dennis M.
TITLE OF INVENTION: METHODS FOR TREATING A PHYSIOLOGICAL
TITLE OF INVENTION: DISORDER ASSOCIATED WITH BETA AMYLOID PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Eli Lilly and Company
STREET: Lilly Corporate Center/1104
CITY: Indianapolis
STATE: Indiana
COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2, Application US/08235400
5. 5552426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600.226-US-01
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Gaps

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RESULT 22
US-08-304-585-1
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                                                                                                                                                                                                                                                                                                         ; TOPOLOGY: linear; MOLECULE TYPE: peptide US-08-476-464A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-235-400-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-476-464A-2
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                                                                   Sequence 1, Application US/08304585 Patent No. 5721106
                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                        Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. 5707821 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/08476464A Patent No. 5707821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: (415)576-0300 INFORMATION FOR SEQ ID NO: 2:
 APPLICANT: Maggio, APPLICANT: Mantyh, TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 15
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION: NAME: STORELLA, JOHN R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: TOWNSEND & CREW LLP
STREET: TWO EMBARCADERO CENTER, 8TH FLOOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/476,464A FILING DATE: 07-JUN-1995 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: SAN FRANCISCO
                                                     INFORMATION:
                                                                                                                                                                                                                                    h 100.0%; ; Similarity 100.0%; ; 30; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94111-3834
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                                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                                                    DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                      DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                           40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DAPPEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (415)326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RUSSELL E.
                   John E.
Patrick W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MICHAEL S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
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A2 IN A-BETA PEPTIDE-MEDIATED NEURODEGENERATIVE DISEASE
LABELLED BETA-AMYLOID PEPTIDE AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15270-002300
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                                                                                                                                                                                                                                      Score 162; DB 1;
Pred. No. 8.7e-19;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 162; DB 1;
Pred. No. 8.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Version #1.30
                                                                                                                                                                                                                                                                        Length 40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 40;
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TYPE: amino acids; TYPE: amino acids; STRANDENESS: not relevant; TOPOLOGY; not relevant; MOLECULE TYPE: peptide
US-08-304-585-1
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US-08-302-808-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: SUZUKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 110.
TELECOMMUNICATION INFORMATION:
TELECHONE: 612-305-1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
APPLICATION NUMBER: US/08/302,808
FILING DATE: 15-SEP-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/JP94/0008:
PILING DATE: 24-JAN-1994
                                                                                                         OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 1.5
CURRENT APPLICATION DATA:
                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEB: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTER SEADABLE FORM:
COMPUTER READABLE FORM:
VERTINA TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: METHODS FOR USE IN DETECTING ALZHEIMER'S DISEASE NUMBER OF SEQUENCES: 12 CORRESPONDENCE ADDRESS:
ADDRESSEE: Mueting, Raasch, Gebhardt & Schwappach, P.A. STREET: P.O. Box 581415
                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/304,585
                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                        COUNTRY: US
ZIP: 02019
                                                                                                                                                                                                                                                               STATE:
                                                                                                                                                                                                                                                                              CITY: BOSTON
                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 12 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        n 100.0%; Score 162; DB 1; Similarity 100.0%; Pred. No. 8.7e-19; 30; Conservative 0; Mismatches 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08302808
                                                                                                                                                                                                                                                                                                    130 WATER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          612-305-1228
                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUZUKI, No. 5750349uhiro
                                                                                                                                              IBM Compatible
SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-SEP-1994
                                                                                                                                                                                     Diskette
                                                                                                                                                                                                                                                                                                                                                                        ANTIBODIES TO B-AMYLOIDS OR THEIR DERIVATIVES AND USE THEREOF
                     PCT/JP94/00089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ::
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0;

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CITY:
COUNTRY USA
ZIP: S458-1415
COUNTRY S88-1415
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTION DATA:
APPLICATION NUMBER: US/08/433,734
FILING DATE: 03-MAY-1995
FILING DATE: 03-MAY-1995
ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 110.00010102
TELECOMMUNICATION INFORMATION:
TELLECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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TELEYAX: 200291 STRE
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
TYPE: amino acid
STRANDEDNESS: single
STRANDEDNESS: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
HYPOTHETICAL: NO
FRAGMENT TYPE: NO
FRAGMENT TYPE: NO
FRAGMENT TYPE: 100.03:
ORIGINAL SOURCE:
US-08-302-808-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence 1, Application US/08433734
Patent No. 5837473
GENERAL INFORMATION:
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Ouery Match
Best Local Similarity 100.0%; Score 162; DB 1;
Best Local Similarity 100.0%; Pred. No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
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NAME: DAVID, RESNICK S
REGISTRATION NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 44631
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 010132/1993
FILLING DATE: 25-JAN-1993
APPLICATION NUMBER: 019035/1993
FILLING DATE: 05-FEB-1993
APPLICATION NUMBER: 286985/1993
FILLING DATE: 16-NOV-1993
APPLICATION NUMBER: 334773/1993
FILLING DATE: 28-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.
APPLICANT: Mantyh, Patrick W.
TITLE OF INVENTION: Labelled -Amyloid Peptide and Methods
TITLE OF INVENTION: for Use in Detecting Alzheimer's Disease
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
STREET: P.O. Box 581415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Mueting
STREET: P.O. Box CITY: Minneapolis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #1.25
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CIASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: KIAUS, EXIC J.
REGISTRATION NUMBER: 36,190
REFERENCE/DOCKET NUMBER: 434-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
TELEPAX: 703-684-1124
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-609-090-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: HENSLEY, Keinsen.
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: ACENEY, John M.
APPLICANT: AKSENOV, Michael
TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF
TITLE OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES
UMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS: 1
STREET: 99 Canal Center Plaza, Suite 300
CITY: ALEXANDRIA
STATE: Virginia
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
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; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-433-734-1
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US-08-609-090-8
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GENERAL INFORMATION:
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Best Local Similarity 100.0%; Pred No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                           Query Match 100.0%; Score 162; DB 1;
Best Local Similarity 100.0%; Pred No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIF: 22314

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/609,090 FILING DATE: 29-FEB-1996 CLASSIFICATION: 530
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                             1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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DABFRHDSGYEVHHQKLVFFAEDVGSNKGA
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30
                                                                                                                    Length 40;
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RESULT 26 US-07-737-371E-69 ; Sequence 69, Application US/07737371E ; Patent No. 5876948 ; GENERAL INFORMATION:

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US-08-682-245A-2
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; MOLECULE TYPE: protein
US-07-737-371E-69
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/08682245A Patent No. 5919631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: GOYAL, SHEFALI
APPLICANT: PAUL, JOSEPH W
APPLICANT: RIEDEL, NORBERT G
APPLICANT: SAHASRABUDHE, SUDHIR
TITLE OF INVENTION: A METHOD OF DETERMINING THE DEGREE
TITLE OF INVENTION: AGGREGATION OF THE BA4 PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                             CORRESPONDENCE ADDRESS:
ADDRESSEE: HOECHST MARION ROUSSEL,
STREET: 2110 E. GALBRAITH RD., P.O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/559,172
FILLING DATE: 27-JUL-1990
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 29-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
TELEFAX: 617-542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Yankner, Bruce A.
TITLE OF INVENTION: SCREENING METHODS TO IDENTIFY
TITLE OF INVENTION: NEGROTOXIN INHIBITORS (AS AME
                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           y Match 100.0%; s
Local Similarity 100.0%; F
hes 30; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
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TELEX: 200154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM COMPONENTING SYSTEM:
                                                                                                          COUNTRY: U.S.A. ZIP: 45215-6300
                                                                                                                                                                CITY: CINCINNATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER: 29,066
REFERENCE/DOCKET NUMBER: 00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: Freeman, John W. REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Boston
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
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225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IBM Compatible
SYSTEM: Windows95
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Pred. No. 8.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                    Version #1.30
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Patent No. 59553:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 513-948-7961
TELEX: 214320
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 02019
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER: 38,537
REFERENCE/DOCKET NUMBER: HR:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 513-948-7369
                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Comp
OPERATING SYSTEM:
SOFTWARE: FASTSEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 40 amino a
TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: 130 1
CITY: BOSTON
                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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SOFTWARE: PastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/986,948
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/302,808
FILING DATE: 15-SEP-1994
APPLICATION NUMBER: PCT/JP94/00089
FILING DATE: 24-JAN-1994
ADDITATION NUMBER: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 019035/1993
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 28-985/1993
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 334773/1993
FILING DATE: 28-DEC-1993
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CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 60/039,414
FILING DATE: 16-AUG-1995
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHWAN
STREET: 130 WATER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: ANTIBODIES TO B-AMYLOIDS OR THEIR TITLE OF INVENTION: DERIVATIVES AND USE THEREOF NUMBER OF SEQUENCES: 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: SUZUKI, No. 5955317uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HR-1257A
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RESULT 29
US-08-461-216-1
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REGISTRATION NUMBER: 34,235
REPERENCE DOCKET NUMBER: 4463
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEPAX: 617-523-6440
TELEFX: 200291 STRE
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acide
TYPE: maino acide
                                                                                                                                                                                                COMPUTER READABLE FORM:

MEDIUM TYPE Diskette-5.25 inch, 1.2Mb storage

COMPUTER: IBM PC/386 Compatible

OPERATING SYSTEM: MS-DOS 4.01

SOFTWARE: WOR'D FOR WINDOWS t

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/461,216

FILING DATE:

CLASSIFICATION DATA:

APPLICATION NUMBER: 07/969,734

APPLICATION NUMBER: 07/969,734

PILING DATE: October 23, 1992

APPLICATION NUMBER: 07/950,417

FILING DATE: September 23, 1992

APPLICATION NUMBER: 07/969,734

PILING DATE: September 23, 1992

APPLICATION NUMBER: 07/969,734

PILING DATE: September 23, 1992

APPLICATION NUMBER: 31,332

ATTORNEY/AGENT INFORMATION:

NAME: Broderick, Thomas F

REGISTRATION UNBER: 31,332

REGISTRATION NUMBER: 31,332

REGISTRATION INFORMATION:

TELEPHONE: 1-206-682-8100; 1-206-224-0709 (direct)

TELEPHONE: 1-206-682-8100; 1-206-224-0709 (direct)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/08461216
Patent No. 5958883
GEMERAL INFORMATION:
APPLICANT: Snow, A.D.
TITLE OF INVENTION: ANIMAL MODEL
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
TELEFAX: 1-206-224-0779
TELEX: 4938023
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 40 amino acids
TYPE: amino acid
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 162;
Best Local Similarity 100.0%; Pred. No. 1
Matches 30; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 1420
STREET: Seattle
STATE: Washington
TOTATRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FRAGMENT TYPE: N-terminal ORIGINAL SOURCE:
                                                                                                                                                               TELEPHONE: 1-206-224-0779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: single LECULE TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 40 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E: Christensen, O'Connor, Johnson and Kindness
1420 Fifth Avenue, Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ANIMAL MODELS OF HUMAN AMYLOIDOSES
                                                                                                                                            1:
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. 8.7e-19;
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Sequence 1, Application US/08959148

| Patent No. 6172277
| GENERAL INFORMATION:
| APPLICANT: Tate, Barbara A.
| APPLICANT: Newton, Julie L.
| TITLE OF INVENTION NON-TRANSGENIC ANIMAL MODEL OF ALZHEIMER'S DISEASE
| FILE REFERENCE: 04930/022001
| CURRENT APPLICATION NUMBER: US/08/959,148
| CURRENT ELING DATE: 1997-10-28
| CURRENT ELING DATE: 1997-10-28
| CURRENT ELING DATE: 1997-10-28
| SOFTWARE: FastSEQ for Windows Version 3.0
| SEQ ID NO 1
| LENGTH: 40
| TYPE: PRT
| ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; DESCRIPTION:
; DESCRIPTION:
US-08-461-216-1
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US-08-959-148-1
  Дb
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US-09-242-724-22
                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-09-242-724-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-959-148-1
                                                                                                                                                                                                                                        Sequence 22, Application US/09242724

Patent No. 6316405

GENERAL INFORMATION:
APPLICANT: Solomon, Michael E.
APPLICANT: Solomon, Michael E.
APPLICANT: Solomon, Michael E.
APPLICANT: Solomon, Michael E.
APPLICANT: Colomon, Michael E.
APPLICANT: Solomon, Michael E.
CIRLER OF INVENTION: Cyclosporin A Conjugates and Uses Therefor FILE REFERENCE: Cyclosporin Analogs
CURRENT APPLICATION UNMEER: US/09/242,724
CURRENT APPLICATION UNMEER: US/09/242,724
CURRENT FILING DATE: 199-02-22

NUMBER OF SEQ ID NOS: 33

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 22

LENGTH: 40

TYPE: PRT
                                                                                              Query Match
Best Local S
Matches 30
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Best Local Similarity 100.0%; Pred, No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
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Best Local Similarity 100.0%; Pred. No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                           ch 100.0%; Score 162; DB 2; Similarity 100.0%; Pred. No. 8.7e-19; 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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FIGURES 23-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 40;
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                                                                                                                                               Length 40;
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RESULT 32 US-08-723-661B-1 ; Sequence 1, Application US/08723661B

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DESCRIPTION: /A4 (1-40); FIGURES 23-29; SEQUENCE DESCRIPTION: SEQ ID NO: 1: US-08-723-661B-1
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US-09-062-365-3
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LENGTH: 40
TYPE: PRT
ORGANISM: Human
S-09-062-365-3
                                                                                                                                                                                                                                                                                                                 Sequence 3, Application US/09062365 Patent No. 6465422
                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                               SEQ ID NO 3
                                                                                   APPLICANT: Schmidt, Ann Marie
APPLICANT: Schmidt, Ann Marie
TITLE OF INVENTION: METHOD FOR INHIBITING TUMOR INVASION OR SPREADING IN.
TITLE OF INVENTION: SUBJECT
FILE REFERENCE: 55424
CURRENT APPLICATION NUMBER: US/09/062,365
CURRENT FILING DATE: 1998-04-17
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 1:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC
COMPUTER: IBM PC
COPERATING SYSTEM: PC-DOS (Windows 98)
SOFTWARE: WordPerfect 5.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/723,661B
FILLING DATE: 31-Oct-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/461,216
FILING DATE: 05-Jun-1995
APPLICATION NUMBER: 07/969,734
FILING DATE: 23-Oct-1992
APPLICATION NUMBER: 07/969,734
FILING DATE: 23-Oct-1992
APPLICATION NUMBER: 07/950,417
FILING DATE: 23-Sep-1992
APPLICATION NUMBER: 07/950,417
FILING DATE: 23-Sep-1992
APPLICATION NUMBER: 07/950,417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS: SINGLE TOPOLOGY: LINEAR MOLECULE TYPE: PEPTILE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Dwyer, Patrick M.
REGISTRATION NUMBER: 32,411
REFERENCE/DOCKET NUMBER: PROTEO.POOC1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 343-7074
TELEFAX: (206) 343-7085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette - 3.50 inch, 1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Patrick M.
STREET: 1818 Westlake
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Alan D Snow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE: WA (Washington)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CE CHARACTERISTICS:
ENGTH: 40 AMINO ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; llarity 100.0%; Conservative 0
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Pred. No. 8.7e-19;
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Avenue
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APPLICANT: FRANGIONE, Blas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, Einar
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-AMYLOIDOGENIC PEPT
TITLE OF INVENTION: HOMOLOGOUS TO AMYLOID BETA FOR INDUCTION OF AN
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA AND AMYLOID DEPOSITS
FILE REFERENCE: 5986/1K433-US1
CURRENT APPLICATION NUMBER: US/09/861,847A
CURRENT FILING DATE: 2001-05-22
PRIOR APPLICATION NUMBER: 60/016,233
PRIOR APPLICATION NUMBER: 60/016,233
PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin version 3.0
SEQ ID NO 7
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US-09-133-866-1
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Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 2
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:

APPLICANT: Glabe, Charles

APPLICANT: Glabe, Charles

APPLICANT: Garzon-Rodriquez, William

APPLICANT: Garzon-Rodriquez, William

TITLE OF INVENTION: FILUORESCENT AMYLOID ABETA PEPTIDES AND

TITLE OF INVENTION: USES THEREOF

FILE REFERENCE: 50016/002002

CURRENT APPLICATION NUMBER: US/09/133,866

CURRENT FILING DATE: 1998-08-13

EARLIER APPLICATION NUMBER: 60/055,660

EARLIER FILING DATE: 1997-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7, Application US/09861847A Patent No. 6713450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                         OTHER INFORMATION: Synthetic FEATURE:
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Amino acid residues 1-6 can either be absent or present as Lys o
OTHER INFORMATION: Asp to form, in combination with residues 7-10, a N-terminal
OTHER INFORMATION: polylysine or polyaspartate segment of 4-10 residues in length
                                                                                                                                                                                                                         LENGTH: 40
TYPE: PRT
ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
NAME/KEY: misc_feature
OTHER INFORMATION: The
                                             FEATURE:
                                                                                                                                                                                                            FEATURE:
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5. 6600017
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100.0%; Pred. No. 8.7e-19;
C-terminal Ala residue may be amidated
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Sequence 3, Application US/09988842

; Sequence 3, Application:
; APPLICANT: Johansson, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; TITLE OF INVENTION: OF ANYLOID FORMATION
; PILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; CURRENT FILING DATE: 2000-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 26
; SOPTMARE: FastSEQ for Windows Version 4.0
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US-09-861-847A-8
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APPLICANT: WISNIEWSKI, Thomas
APPLICANT: SIGURDSSON, Einax
APPLICANT: SIGURDSSON, EINAX
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-AMYLOIDOGENIC PEPTIDES
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA FOR INDUCTION OF AN IMMUN
TITLE OF INVENTION: RESPONSE TO AMYLOID BETA AND AMYLOID DEPOSITS
FILE REFERENCE: 5986/14433-US1
CURRENT APPLICATION NUMBER: US/09/861,847A
CURRENT APPLICATION NUMBER: US/09/861,847A
CURRENT FILING DATE: 2001-05-22
PRIOR FILING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTING DATE: 2000-05-22
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN PATENT PATENTIN PATEN
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Best Local Similarity 100.0%; Pred, No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
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Patent No. 6713450
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OTHER INFORMATION: Synthetic
PEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Amino acid residues 35-40 can either be absent or present as Ly
OTHER INFORMATION: or Asp to form, in combination with residues 31-34, a C-termins
OTHER INFORMATION: polylysine or polyaspartate segment of 4-10 residues in length
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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                                                                                                          Q ID NO 3
LENGTH: 40
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-terminal
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US-10-151-614-1
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                                                                                                                                                                                                                             ; TYPE: PRT; ORGANISM: Homo sapiens US-10-151-614-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens
US-10-455-218-1
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US-10-455-218-1
                                                                           Query Match 100
Best Local Similarity 100
Matches 30; Conservative
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Best Local S
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        1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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Sequence 1, Application US/10151614

Patent No. 6821504

GENERAL INFORMATION:
APPLICANT: WISNIEWSKI, Thomas
APPLICANT: TURNBULL, Daniel
APPLICANT: SIGURDSSON, Einar
APPLICANT: ZAIM WADGHIRI, Youssef
TITLE OF INVENTION: DETECTION OF ALZHEIMER'S AMY
FILE REFERENCE: WISNIEWSKI 2A
CURRENT APPLICATION NUMBER: US/10/151,614
CURRENT FILLING DATE: 2002-05-23
PRIOR APPLICATION NUMBER: US 60/292,625
PRIOR APPLICATION TOMBER: US 60/292,625
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.1
I SUFTWARE: Patentin version 3.1
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US-09-988-842-3
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CURRENT EPILIAGE ADTE: 2003-06-05

PRIOR APPLICATION NUMBER: US/09/133,866

PRIOR PILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US/09/133,866

PRIOR APPLICATION NUMBER: BARLIER APPLICATION NUMBER: 60/055,660

PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 2

SOFTWARE: FASTSEQ for Windows Version 3.0

LENGTH: 40

TYPE: PRT
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Patent No. 6770448
GENERAL INFORMATION:
APPLICANT: Glabe, Charles
APPLICANT: Garzon-Rodriguez, Willi
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Best Local Similarity 100.0%; Pred. No. 8.7e-19;
Matches 30; Conservative 0; Mismatches 0;
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TITLE OF INVENTION: FLUORESCENT AMYLOID ABETA PEPTIDES
TITLE OF INVENTION: USES THEREOF
FILE BEFERENCE: FORTING BEFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ch 100.0%; Score 162; DB 2; Similarity 100.0%; Pred. No. 8.7e-19; 30; Conservative 0; Mismatches 0;
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100.0%; Score 162; DB 2;
100.0%; Pred. No. 8.7e-19;
tive 0; Mismatches 0;
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                                               Length 40;
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CURRENT APPLICATION NUMBER: US/09/623,548A
CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-18
PRIOR PRIOR DATE: 1999-10-18
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US-09-623-548A-956
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NUMBER OF SEQ ID NOS: 1617
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 956
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GENERAL INFORMATION:
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
FILE REFERENCE: 2110
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CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR APPLICATION NUMBER: 60/159,783
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APPLICANT: Thibaudeau, Karen
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
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APPLICANT:
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APPLICANT: Bridon, Dominique
APPLICANT: Ezrin, Alan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30;
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Ezrin, Alan
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ilarity 100.0%;
Conservative (
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Pred. No. 8.7e-19;
); Mismatches 0;
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; PEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: Peptide
US-09-623-548A-978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-623-548A-989
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CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
GENERAL INFORMATION:

APPLICANT: Conjuchen, Inc.

APPLICANT: Eridon, Dominique

APPLICANT: Ezrin, Alan

APPLICANT: Milner, Peter

APPLICANT: Holmes, Darren

APPLICANT: Holmes, Darren

APPLICANT: Thibaudeau, Karen

APPLICANT: TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM

TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Conjuchem, 1
APPLICANT: Bridon, Don
APPLICANT: Bzrin, Alar
APPLICANT: Milner, Pet
APPLICANT: Holmes, Dat
APPLICANT: Thibaudeau,
                                                                                                                                                                                                 Sequence 1005, Application US/09623548A Patent No. 6849714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 30; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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FILE REFERENCE: 2110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 40
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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Holmes, Darren
Thibaudeau, Karen
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Ezrin, Alan
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                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 162; DB 2; 100.0%; Pred. No. 8.7e-19; o. Mismatches 0;
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Pred. No. 8.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 40;
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FILE REFERENCE: 2110
CURRENT APPLICATION NUMBER: US/09/623,548A
CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR PILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-18
NUMBER: OF SEQ ID NOS: 1617
SEQ ID NO 1005
LENGTH: 40
LENGTH: 40
LENGTH: 607
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COURTENT APPLICATION NUMBER: US/09/657,276
CURRENT APPLICATION NUMBER: US/09/657,276
CURRENT FILING DATE: 2000-09-07
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR PELING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR FILING DATE: 1999-09-10
PRIOR FILING DATE: 1999-09-10
PRIOR FILING DATE: 1999-09-10
PRIOR FILING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
PRIOR FILING DATE: 1999-10-18
SOFTWARE: FALENCHIN VET. 2.1
SEQ ID NO 956
LENGTH: 40
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Peptide
US-09-623-548A-1005
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APPLICANT: Bridon, Dominique
APPLICANT: Exin, Alan
APPLICANT: Milner, Peter
APPLICANT: Hilmes, Darren
APPLICANT: Hilmes, Darren
APPLICANT: Hilmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION
TITLE OF INVENTION: COMPONENTS
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 30
                                                                                                                                                                                                        Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
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1 Similarity 100.0%; Pred. No. 8.7e-19;
30; Conservative 0; Mismatches 0;
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                                                                                                                                                                      h 100.0%;
Similarity 100.0%;
30; Conservative 0
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                                            DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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Holmes, Darren
Thibaudeau, Karen
Thibaudeau, Karen
Thibaudeau, Karen
THOMENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
VENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
VENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09657276
37470
                                                                                                                                                                      0;
                                                                                                                                                                 Score 162; DB 2;
Pred. No. 8.7e-19;
Mismatches 0;
                                                                                                                                                                                                                                                    Length 40;
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APPLICANT: Exito, Alan
APPLICANT: Exito, Alan
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC P.
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTICN
CURRENT APPLICATION NUMBER: US/09/657,276
CURRENT FILING DATE: 1990-07
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR APPLICATION NUMBER: 60/15
                                                                                                                        RESULT 46
US-09-657-276-989
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US-09-657-276-978
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Patent No. 6887470
GENERAL INFORMATION:
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Conjuchem, Inc.
APPLICANT: Bridon, Dominique
APPLICANT: Bridon, Dominique
APPLICANT: Bridon, Dominique
APPLICANT: Ezrin, Alan
APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FF
TITLE OF INVENTION: COMPONENTS
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No.
ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             989,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  th 100.0%; Score 162; DB 2; Similarity 100.0%; Pred. No. 8.7e-19; 30; Conservative 0; Mismatches 0;
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6887470
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PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
COMPONENTS
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; OTHER INFORMATION: Description of Artificial Sequence: Synthetic ; OTHER INFORMATION: Peptide US-09-657-276-989
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US-09-962-955D-36
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US-09-657-276-1005
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CURRENT APPLICATION NUMBER: US/09/657,276

CURRENT FILING DATE: 2000-09-07

PRIOR APPLICATION NUMBER: 60/134,406

PRIOR FILING DATE: 1999-05-17

PRIOR APPLICATION NUMBER: 60/153,406

PRIOR FILING DATE: 1999-09-10

PRIOR APPLICATION NUMBER: 60/159,783

PRIOR APPLICATION NUMBER: 60/159,783

PRIOR FILING DATE: 1999-10-18

NUMBER OF SEQ ID NOS: 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Pat
SEQ ID NO 1005
LENGTH: 40
                                                                                                                                                                                                     Sequence 36, Application US/09962955D Patent No. 6933280
GENERAL INFORMATION:
APPLICANT: CASTILLO, GERARDO
APPLICANT: SNOW, ALAN D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1005, Application US/09657276 Patent No. 6887470
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
            TITLE OF INVENTION: PEPTIDES FOR THE TREATMENT OF ALZHEIMER'S DISEASE AND TITLE OF INVENTION: OTHER BETA-AMYLOID PROTEIN FIBRILLOGENESIS DISORDERS FILE REFERENCE: PROTEO, P03CI CURRENT APPLICATION NUMBER: US/09/962,955D CURRENT FILING DATE: 2001-09-24 PRIOR APPLICATION NUMBER: 09/938,275 PRIOR PELICATION NUMBER: 09/938,275 PRIOR PILING DATE: 2001-08-22 PRIOR PILING DATE: 2001-08-22 PRIOR PILING DATE: 1997-10-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Milner, Peter
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: Description OTHER INFORMATION: Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 100.0%; Score 162; DB 2; Local Similarity 100.0%; Pred. No. 8.7e-19;
APPLICATION NUMBER: 60/027,981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
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                                                                                                                                                                                                                                                                                                                                                                                                            DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bridon, Domi
Ezrin, Alan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conjuchem, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 162; DB 2;
Pred. No. 8.7e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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; TYPE: PRT
; ORGANISM: Mus musculus
US-09-962-955D-36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        당
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PCT-US92-06700-1
                                                                                                                                    PCT-US92-06700-1
                                                              Query Match
Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 1996-10-08
NUMBER OF SEQ ID NOS: 89
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application PC/TUS9206700 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (612) 332-9081 INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Kowalchyk, Alan W.
REGISTRATION NUMBER: 31,535
REFERENCE/DOCKET NUMBER: 600
TELECOMMUNICATION INFORMATION:
TELEPHONE: (612) 332-5300
                                                                                                                                                                                                                                                    MOLECULE TYPE: Peptide FRAGMENT TYPE: Internal Fragment ORIGINAL SOURCE: Synthetically Derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mantyh, Patrick W.
APPLICANT: Maggio, John E.
TITLE OF INVENTION: Labelled -Amyloid Peptide
TITLE OF INVENTION: and Alzheimer's Disease Detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                      NAME/KEY:
NAME/KEY:
LOCATION:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM 1115. COMPUTER: Northgate 386
OPERATING SYSTEM: DOS 4.0
COMPUTER: WordPerfect 5.0
                                                                                                                                                                                                                                                                                                          TYPE: AMINO ACID TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: POPILING DATE: 19920810
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                                                                                                                                                                                                                                                                                                                                        ENGTH:
                                                                   30;
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                                                                                    Similarity
                   DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minnesota
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3100 Norwest Center
                                                                                                                                                                                                                                                                                                                                          40 amino acid residues
                                                                100.0%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; ilarity 100.0%; Conservative 0;
                                                                                                                                                  Internal fragment of the amyloid peptide precursor Represents isolated internal sequence of 40 amino acid residues the -amyloid peptide precursor
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                                                                  0;
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Pred. No. 8.7e-19;
Mismatches 0;
                                                                                  Score 162; DB 4;
Pred. No. 8.7e-19;
                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
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                                                                                                  Length 40;
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                                                                   Indels
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                                                                   0
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                                                                   Gaps
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CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: PCT/JP94/00089
PILING DATE: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
PILING DATE: 22-JAN-1993
PILING DATE: 25-JAN-1993
PILING DATE: 25-JAN-1993
PILING DATE: 16-NOV-1993
APPLICATION NUMBER: 34/73/1993
PILING DATE: 16-NOV-1993
APPLICATION NUMBER: 34/73/1993
APPLICATION NUMBER: 34/235
REGISTRATION NUMBER: 34/235
REGISTRATION NUMBER: 44631
TELECHOME: 617-523-3400
TELEX: 20291 STRE
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 41 amino acids
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
ANTI
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US-08-302-808-4
RESULT 51
US-08-682-245A-3
; Sequence 3, Application US/08682245A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-302-808-4
                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 162; DB 1; Length 41; Best Local Similarity 100.0%; Pred No. 9e-19; Matches 30; Conservative 0; Mismatches 0; Indels
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APPLICANT: SUZUKI, No. 5750349uhiro

APPLICANT: OPAKA, Asano

APPLICANT: KITADA, Chieko

TITLE OF INVENTION: ANTIBODIES TO B-AMYLOIDS OR THEIR

TITLE OF INVENTION: DERIVATIVES AND USE THEREOF

NUMBER OF SEQUENCES: 14

CORRESPONDENCE ADDRESS:

ADDRESSEE: DIKB, BRONSTEIN, ROBERTS & CUSHMAN

STREET: 130 WATER STREET

CITY: BOSTON

STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/302,
FILING DATE: 15-SEP-1994
CLASSIFICATION: 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ANTI-SENSE: NO FRAGMENT TYPE: N-terminal ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
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                                                                                                                                                                                            Application US/08302808
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US-08-986-948-4
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COUNTRY: U.S.A.

ZIP: 45215-6300

COMPUTER READALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DDS/MS-DOS
SOFTWARE: PATENTIA RELEASE #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/682,245A

FILING DATE: 17-JUL-1996

CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION MUMBER: US 60/039,414

FILING DATE: 16-AUG-1995

ATTORNEY/AGENT INFORMATION:
NAME: LENTZ, NELSEN L

REGISTRATION NUMBER: 38,537

REFERENCE/DOCKET NUMBER: HR-1257A

TELEPHONE: 513-948-7369

TELEPHONE: 513-948-7369

TELEPHONE: 513-948-7369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 100.0%; Score 162; DB 1; Length 41; Best Local Similarity 100.0%; Pred. No. 9e-19; Matches 30; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                             Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 5919631
GENERAL INFORMATI
                                                                                                                                                                                                  GENERAL INFORMATION:
APPLICANT: SUZUKI, No. 5955317uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
APPLICANT: KITADA, Chieko
TITLE OF INVENTION: ANTIBODIES TO B-AMYLOIDS OR THEIR
TITLE OF INVENTION: DERIVATIVES AND USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPAX: 513-948-7961 OR TELEX: 214320
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
STREET: 130 WATER STR
CITY: BOSTON
STATE: MA
SOUNTRY: USA
COUNTRY: USA
ZIP: 02019
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: RIEDEL, NORBERT G
APPLICANT: SAHASRABUDHE, SUDHIR
TITLE OF INVENTION: A METHOD OF DETERMINING THE DEGREE
TITLE OF INVENTION: A GEREGATION OF THE BA4 PEPTIDE
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: HOECHST MARION ROUSSEL, INC.
STREET: 2110 E. GALBRAITH RD., P.O. BOX 156300
                                                                                                      NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
STREET: 130 WATER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: 2110 E. (CITY: CINCINNATI STATE: OHIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: 513-948-7961 OR 4681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                             Application US/08986948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 amino acids
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PAUL, JOSEPH W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INC.
BOX 156300
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SOFTWARE: FastSEQ Version 1.5
CURRENT APPLICATION DATA:

OPERATING SYSTEM:

IBM Compatible

TYPE:

Diskette

APPLICATION NUMBER: US/08/986,948

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                                                                                                                                                                                                                                                                                                                                                                 RESULT 53
US-07-744-767A-2
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                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/07744767A Patent No. 5434050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 15-SEP-1994
APPLICATION NUMBER: PCT/JF
FILING DATE: 24-JNN-1994
APPLICATION NUMBER: 01032
FILING DATE: 25-TAN-1993
APPLICATION NUMBER: 019035
FILING DATE: 05-FEB-1993
APPLICATION NUMBER: 286985
FILING DATE: 16-NOV-1993
APPLICATION NUMBER: 334773
APPLICATION NUMBER: 334773
APPLICATION DATE: 28-DEC-1993
APPLICATION DECENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEX: 200291 STRE INFORMATION FOR SEQ ID NO:
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 44
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEPAX: 617-523-6440
                                                                                                                                                                                                                                 APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.
TITLE OF INVENTION: Labelled -Amyloid Peptide and Methods
TITLE OF INVENTION: for Use in Detecting Alzheimer's Disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide HYPOTHETICAL: NO
                                                                                                                                                                              NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 41 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER:
                                                                                                                                              CITY: Minneapolis
                                                                                                                                                                 STREET:
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CLASSIFICATION:
                                                                                                           COUNTRY:
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                                                                                                                                                                                                                                                                                                              INFORMATION:
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                                                                                                                                                                 E: Schwegman, Lundberg & Woessner, P.A. 3500 IDS Center
                                                                                                              USA
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MBER: 019035/1993
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Pred. No. 9e-19;
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   Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 41;
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RESULT 54
US-08-179-574-1
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Query Match
Best Local Similarity
"Arches 30; Conserva
                                                                                ; TOPOLOGY: US-08-179-574-1
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GENERAL INFORMATION:
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                             TELEPAX: 617-861-9540
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE; amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 13-JAN-11992
ATTORNEY/AGENT INFORMATION:
NAME: Granahan, Patricia
REGISTRATION NUMBER: 32,22
REFERENCE/DOCKET NUMBER: H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Huntington Potter APPLICANT: Usamah Kayyali TITLE OF INVENTION: Compound NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                 TELEPHONE: 617-861-6240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 42 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 60
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Lexington
STATE: Massachusetts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: FILING DATE: 13-AUC CLASSIFICATION: 435
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                                                                                                                                                                                                TELEPHONE:
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Similarity 100.0%;
30; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E: Hamilton, Brook, Two Militia Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    U.S.A.
                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                               PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612-339-0331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compounds and Methods for Inhibiting
                 100.0%; Score 162; DB 1; Length 42; 100.0%; Pred. No. 9.3e-19; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                  US 07/819,361
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Pred. No. 9.3e-19;
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                  Gaps
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30

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COUNTRY: US
CIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: PatentIn Release #1.0, Version #1.25
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/347,144
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: AUERBACH, JEFFREY I.
REGISTRATION UMBER: 32,680
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 383-7451
TELEPHONE: (202) 383-6610
                                                                                                                                                                                                                   RESULT 56
US-08-462-859A-19
; Sequence 19, Application US/08462859A
barent No. 5652092
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US-08-347-144-1
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US-08-347-144-1
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
TYPE: peptide
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
FRAGMENT TYPE: N-terminal
ORGANISM: AMYLOID PEPTIDE
ORGANISM: AMYLOID PEPTIDE
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APPLICANT: ANDERSON, STEPHEN

TITLE OF INVENTION: METHODS FOR THE PREVENTION AND TREATMENT

TITLE OF INVENTION: OF VASCULAR HEMORRHAGING AND ALZHEIMER'S DISEASE

NUMBER OF SEQUENCES:

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 1299 PENI CITY: WASHINGTON STATE: D.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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1299 PENNSYLVANIA AVENUE, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 162; DB 1; ilarity 100.0%; Pred. No. 9.3e-19; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 42;
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COUNTRY:
ZIP: 12054
ZIP: 12054
ZIP: 12054
ZIP: 12054
ZIP: 12054
ZIP: 2054
ZI
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ZIP: 07470-8426

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/08/462,859A
FILING DAATE: 05-UN-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Barnhard, Elizabeth M.
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,844-04
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPAX: (201)831-3305
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acids
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US-08-123-659A-19
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-462-859A-19
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GENERAL INFORMATION:
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Best Local Similarity
Matches 30; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 163 CITY: Delmar STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Jacobsen, J. S. APPLICANT: Vitek, M. P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: New Jersey
COUNTRY: United St
ZIP: 07470-8426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anne Rosenblum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        No. 5656477el Amyloid Precursor and Method of
Using Same to Access Agents Which Down-Regulate Formation
of B-Amyloid Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 42;
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RESULT 59
US-08-464-248A-19
; Sequence 19, Application US/08464248A
; Patent No. 5703209
; GENERAL INFORMATION:
; APPLICANT: Jacobsen, J. S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TOPOLOGY: linear ; MOLECULE TYPE:. protein US-08-123-659A-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Jacobsen, J. S.
APPLICANT: Vitek, M. P.
APPLICANT: Vitek, M. P.
TITLE OF INVENTION: No. 5693478el Amyloid Precursor and Method of
TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
TITLE OF INVENTION: of B-Amyloid Peptide
                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 30; Conservative (
                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 201-683-4117
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTORNEY/AGENT INFORMATION:
NAME: Barthard, Elizabeth M.
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: One Camp
CITY: Parsippany
                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: ZUI-C.
TELEPHONE: ZUI-C.
TO TO NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/08/464,247A FILING DATE: 05-JUN-1995 CLASSIFICATION: 435
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ZIP: 07054
                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19, Application US/08464247A
>. 5693478
                                                                                                                                                                                                                       30;
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                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                           amino acid
                                                                                                                                                                        DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                  DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        American Cyanamid Company
                                                                                                                                                                                                                                                                                                                                                                                                                                                    201-683-2158
                                                                                                                                                                                                                   100.0%; So
100.0%; P:
ative 0;
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Pred. No. 9.3e-19;
                                                                                                                                                                                                                     Score 162; DB 1;
Pred. No. 9.3e-19;
); Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Version #1.30
                                                                                                                                                                                                                                                      Length 42;
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RESULT 60
US-08-476-464A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: RYDEL, RUSSELL E.
APPLICANT: DAPPEN, MICHAEL S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (201)831-326
TELEPAX: (201)831-3305
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Barnhard, Elizabeth M.
REGISTRATION NUMBER: 31,088
REFERENCE/DOCKET NUMBER: 31,83
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201)831-3246
                                                                                                                                                            COUNTRY: U.S.A.
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Patentin Release #1.0, Version #1.30 CURENT APPLICATION DATA: APPLICATION NUMBER: US/08/464,248A FILING DATB: 05-UN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Vitek, M. P.
TITLE OF INVENTION: No. 5703209el Amyloid Precursor and Method of
TITLE OF INVENTION: Using Same to Access Agents Which Down-Regulate Formation
TITLE OF INVENTION: of B-Amyloid Peptide
APPLICATION NUMBER: US/0:
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                        SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: American
                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                             STREET: TWO EMBARCADERO CITY: SAN FRANCISCO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: United ZIP: 07470-8426
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                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 42 amino acids
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One Cyanamid Plaza
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O EMBARCADERO CENTER, 8TH FLOOR
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100.0%; Pred. No. 9.3e-19;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                       THERAPEUTIC INHIBITION OF PHOSPHOLIPASE AZ IN A-BETA PEPTIDE-MEDIATED NEURODEGENERATIVE DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                           US/08/476,464A
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                                                                                                      Version #1.30
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; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-476-464A-1
                                                                                                                                                                                                                                                                                                           ; MOLECULE T
US-08-304-585-2
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TELEPAX: (415)576-0300
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                  NAME: Mueting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE, DOCKET NUMBER: 110.1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1217
TELEPAX: 612-305-1228
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
MOLECULE TYPE: peptide
15-04.304.854-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA

ZIP: 55458-1415
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/304,585
FILING DATE: 12-SEP-194
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MISCHION: 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
                                                                                                                                              Ouery Match 100.0%; Score 162; DB 1; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
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Patent No. 5721106
GENERAL INFORMATION:
APPLICANT: Maggio, John E.
APPLICANT: Mantyh, Patrick W.
APPLICANT: MARTYN, PATRICK W.
APPLICANT W.
APPLICANT 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: STORELLA, JOHN R.
REGISTRATION NUMBER: 32,944
REFERENCE/DOCKET NUMBER: 15;
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415)326-2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Mueting
STREET: P.O. Box 5:
CITY: Minneapolis
STATE: MN
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                                                                                                                                                                                                                             Length 42;
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HYPOTHETICAL: NO PROPERTY SERVERSE: NO FRAGMENT TYPE: N-terminal ORIGINAL SOURCE: US-08-302-808-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: BOSTON

CITY: BOSTON

STATE: MA

COUNTRY: USA

ZIP: 02019

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASESEQ Vecsion 1.5

CURRENT APPLICATION UNMER: DCS
SOFTWARE: 15-SEP-1994

CLASSIFICATION NUMBER: PCT/JP94/00089
FILING DATE: 15-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 01035/1993
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 01035/1993
APPLICATION NUMBER: 25-BOSTON
APPLICATION NUMBER: 34773/1993
APPLICATION NUMBER: 34773/1993
APPLICATION NUMBER: 34,235
REGISTRATION INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION INFORMATION:
NAME: DAVID, RESNICK S
REGISTRATION TON NUMBER: 34,235
REFERENCE/DOCKET NUMBER: 44631
TELEPAX: 617-523-3400
TELEPAX: 617-523-6440
INFORMATION FOR SEG ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acide
TYPE: amino acide
TYPE: amino acide
TYPE: amino acide
TYPE: mino acide
TYPE: TERPAY: 617-523-5400
TELEX: TOTOWNER: 617-523-5400
TELEX: TOTOWNER: 617-523-5400
TELEX: 100-100-1000
TELEX: 100-1000
TELEX: 1000
TELEX: 10
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US-08-302-808-5
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Patent No.
                                                                                                                               Query Match 100.0%; Score 162; DB 1;
Best Local Similarity 100.0%; Pred. No. 9.3e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: ANTITITE OF INVENTION: DERINGMENT OF SEQUENCES: 14
CORRESPONDENCE ADDRESSES DIKE, BRON
                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: 1i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEB: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
STREET: 130 WATER STREET
CITY: BOSTON
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5, Application US/08302808
5. 5750349
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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                  . peptide
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                                                                                                                                                                                                       Length 42;
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RESULT 63 US-08-268-348A-1 ; Sequence 1, Application US/08268348A

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                                                                                                                                                                                                                                           Sequence 3, Application Patent No. 5750374
                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                   APPLICANT: Dobeli, Heinz
APPLICANT: Draeger, Nicholas
APPLICANT: Trottman, Gerda H
APPLICANT: Jakob, Peter
APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: Process fo
TITLE OF INVENTION: Producing
                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEFAX: (201) 235-350 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: peptide FRAGMENT TYPE: N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 93110755.1
FILING DATE: 06-JUL-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/268,348A
FILING DATE: 29-JUN-1994
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: PROCESS
TITLE OF INVENTION: Polypept
TITLE OF INVENTION: Producin
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION: TELEPHONE: (201) 235-6326
                                   CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS
                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Jakob, Peter
APPLICANT: Stuber, Dieti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Parise, John P.
REGISTRATION NUMBER: 34,403
REFERENCE/DOCKET NUMBER: 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ocal Similarity
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3: Hoffmann-La Roche Inc.
340 Kingsland Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; S
100.0%; P
ntive 0;
                                                                       Process for Producing Hydrophobic Polypeptides and Proteins, and Fusion Proteins for Use in Producing Same
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Pred. No. 9.3e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 42;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, A
       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/268,348A
FILING DATE: 29-JUN-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 93110755.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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TELEFAX: (201) 235-35
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                        APPLICANT: Jakob, Peter
APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: Process for Producing Hydrophobic
TITLE OF INVENTION: Polypeptides and Proteins, and Fusion Proteins for Use
TITLE OF INVENTION: Producing Same
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 93110755.1
FILING DATE: 06-JUL-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE: FRAGMENT TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (201) 235-6326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 07110
COMPUTER READABLE FORM:
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                                                                                                                                                                                                                 STATE: New Jersey COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                     STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Parise, John P. REGISTRATION NUMBER: 34. REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: FILING DATE: 29-JUN
FILING DATE:
                                                                                                                                                                                                                                                                                       ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: New Jersey COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08268348A
                                                                                                                                                                                                                                                                    340 Kingsland Street
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06-JUL-1993
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) 235-3500
Q ID NO: 3:
                                                                             US/08/268,348A
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Pred. No. 9.3e-19;
                                                                                                                  Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 42;
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER READABLE FORM:
COMPUTER READABLE POSS/MS-DOS
SOFTMARE: IBM PC-COMPSHS-DOS
SOFTMARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/268,348A
FILING DATE: 29-JUN-1994
CLASSIFICATION + 435
PRIOR APPLICATION NUMBER: EP 93110755.1
PRIOR APPLICATION NUMBER: BP 93110755.1
APPLICATION NUMBER: BP 93110755.1
PRIOR APPLICATION NUMBER: 44.403
REFERENCE/DOCKET NUMBER: 44.03
REFERENCE/DOCKET NUMBER: 4105/157
TELECOMPUNICATION INFORMATION:
TELEPHONE: (201) 235-6326
TELEPHONE: (201) 235-3500
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: TYPE: Peptide
TRAGMENT TYPE: N-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-268-348A-4
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REGISTRATION NUMBER: 34,403
REFERENCE DOCKET NUMBER: 4105
TELECOMMUNICATION INFORMATION:
TELEPHONE: (201) 235-6326
TELEPAX: (201) 235-3500
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acids
TYPE: amino acids
TYPE: amino acid
TOPOLOGY: lineatid
TOPOLOGY: lineatid
TOPOLOGY: lineatid
TOPOLOGY: lineatid
TOPOLOGY: lineatid
TOPOLOGY: N-terminal
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Best Local
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APPLICANT: Dobeli, Heinz
APPLICANT: Draeger, Nicholas
APPLICANT: Trottman, Gerda H
APPLICANT: Jabob, Peter
APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: Process for Producing Hydrophobic
TITLE OF INVENTION: Polypeptides and Proteins, and Fusion Proteins for Use
NIMPER OF INVENTION: Producing Same
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Hoffmann-La Roche Inc.
STREET: 340 Kingsland Street
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STATE: New Jersey COUNTRY: U.S.A. ZIP: 07110
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CITY: Nutley
STATE: New Jo
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3. 5750374
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RESULT 67
US-08-268-348A-6
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                                                                                                       US-08-268-348A-6
                                               Query Match 100.0%; Score 162; DB 1; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6, Application US/08268348A
Patent No. 5750374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATE APPLICANT: II
APPLICANT: II
APPLICANT: II
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Best Local Similarity 100.0%; Score 162; DB 1;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Jakob, Peter
APPLICANT: Stuber, Dietrich
TITLE OF INVENTION: Process for Producing Hydrophobic
TITLE OF INVENTION: Polypeptides and Proteins, and Fusion Proteins for Use
TITLE OF INVENTION: Producing Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET: 340 Kingsla
CITY: Nutley
STATE: New Jersey
COUNTRY: U.S.A.
ZIP: 07110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                        1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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340 Kingsland Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Trottman, Gerda H
Jakob, Peter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobeli, Heinz
Draeger, Nicholas
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RESULT 68
US-08-433-734-2
i Sequence 2, Application US/08433734
i Patent No. 5837473
j GENERAL INFORMATION:

Patrick W.

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US-08-609-090-9
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                                                                                                                                                                                                                                                                   Patent NO. 1971-1971
GENERAL INFORMATION:
APPLICANT: HUTTERFIELD, D. A.
APPLICANT: BUTTERFIELD, D. A.
APPLICANT: CARNEY, John M.
APPLICANT: CARNEY, John M.
APPLICANT: AKSENOV, Michael
TITLE OF INVENTION: A PROCESS FOR ENHANCING THE ACTIVITY OF
TITLE OF INVENTION: AN OLIGOPEPTIDE OR POLYPEPTIDES
TITLE OF SEQUENCES: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPAX: 612-30 ... 2:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE 42 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/433,734
FILING DATE: 03-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Mueting, Ann M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/609,090
FILING DATE: 29-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-305-1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                  STREET: 99 Canal CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
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CLASSIFICATION:
                                                                                                                                                                                             COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08609090
                                                                                                                                                                                                              Virginia.
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P.O. Box 581415
                                                                                                                                                                                                                                                       99 Canal Center Plaza, Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 162; DB 1; 100.0%; Pred. No. 9.3e-19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Labelled -Amyloid Peptide and Methods for Use in Detecting Alzheimer's Disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    33,977
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Kraus, Eric J.

REGISTRATION NUMBER: 36,190
REFERENCE/DOCKET NUMBER: 434-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
TELEPEAX: 703-684-1124
INFORMATION FOR SEQ ID NO: 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 5876948
GENERAL INFORMATION:
APPLICANT: Yankne
Query Match 100.0%; Score 162; DB 1; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                     TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/37,37.
FILING DATE: 29-JUL-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION MATE: 07/559,172
FILING DATE: 27-JUL-1990
ATTORNEY/AGENT INFORMATION:
NAME: Freeman, John W.
REGISTRATION NUMBER: 29,066
REFERENCE/DOCKET NUMBER: 00108/0:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-542-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson, P.C.
STREET: 225 Franklin Street
                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                           TOPOLOGY:
                                                                                                                                                                                                               TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM Con
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
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TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30;
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                                                                                                         amino acid
XGY: linear
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                                                                                                                                                                                                               617-542-8906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IBM Compatible
SYSTEM: Windows95
                                                                                     protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCREENING METHODS TO IDENTIFY
                                                                                                                                                                                                                                                                                                                                                                                                                               US/07/737,371E
                                                                                                                                                                                                                                                                     00108/028002
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                               Length 42;
 Indels
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Version #1.30

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RESULT 71
US-08-422-333-4
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                                                                              PATENT NO. 591631

GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: GOYAL, SHEFALI
APPLICANT: PAUL, JOSEPH W
APPLICANT: RIEDEL, NORBERT G
APPLICANT: SAHASKABUDHS, SUDHIR
TITLE OF INVENTION: A METHOD OF DETERMIN
TITLE OF INVENTION: AGGREGATION OF THE B
NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
ADDRESSEE: HOECHST MARION ROUSSEL, INC
STREET: 2110 E. GALBRAITH RD., P.O. BC
                                                                                                                                                                                                                                                                                                                                                                  US-08-682-245A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-422-333-4
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GENERAL INFORMATION:
APPLICANT: CORDELL, Barbara L.
TITLE OF INVENTION: TRANSGENIC NO
TITLE OF INVENTION: THE AMYLOID-P.
NUMBER OF SCOUENCES: 30
CORRESPONDENCE ADDRESS:
ADDRESSEE: Scioe, Inc.
STREET: 2450 Bayshore Parkway
STREET: Mountain View
                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/08682245A Patent No. 5919631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 100.0%; Score 162; DB 1;
Best Local Similarity 100.0%; Pred. No. 9.3e-19;
Matches 30; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 94043

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC_DOS/MS_DOS

SOFTWARE: Patentin Release #1.0, V

CURRENT APPLICATION DATA:

APPLICATION UNMBER: US/08/422,333

FILING DATE: 13-APR-1995

CLASSIFICATION: 800

ATTORNEY/AGENT INFORMATION:

NAME: Shearer, Peter R.

REGISTRATION UNMBER: 28,117

REFERENCE/DOCKET NUMBER: 21900-280

TELEPHONE: (415) 968-2436

TELEPHONE: (415) 968-2436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPAX: (415) 968-2438
INFORMATION FOR SEQ ID NO: .
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
TYPE: amino acids
TYPE: amino acid
STRANDEDESS: single
                 STREET: 2110 E. G. CITY: CINCINNATI STATE: OHIO COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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5912410
     Y: U.S.A.
45215-6300
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TRANSGENIC NON-HUMAN MAMMAL DISPLAYING
THE AMYLOID-FORMING PATHOLOGY OF ALZHEIMER'S DISEASE
30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Release #1.0, Version #1.30
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                                                                                                                                                                      DETERMINING THE DEGREE OF OF THE BA4 PEPTIDE
                                                                                     INC.
BOX 156300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match DB 1, DB 1, Best Local Similarity 100.0%; Score 162; DB 1, Best Local Similarity 100.0%; Pred, No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPRAN: 513-948-7359
TELEPRAN: 513-948-7961 OR 4681
TELEX: 214320
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ver
CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/08/682,245A
FILING DATE: 17-JUL-1996
CLASSIFICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION UNWHER: US 60/039,414
FILING DATE: 16-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAPE: LERTZ, NELSEN L
REGISTRATION NUMBER: 38,537
REFERENCE/DOCKET NUMBER: 38,537
REFERENCE/DOCKET NUMBER: TELEPHONE: 513-948-7369
TELEPHONE: 513-948-7369
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/302,808
FILING DATE: 15-SEP-1994
APPLICATION NUMBER: PCT/JP94/00089
FILING DATE: 24-JAN-1994
APPLICATION NUMBER: 010132/1993
FILING DATE: 25-JAN-1993
APPLICATION NUMBER: 019035/1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: SUZUKI, No. 5955317uhiro
APPLICANT: ODAKA, Asano
APPLICANT: KITADA, Chieko
                                                                                                                                                                                                                COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/986,948
                                                                                                                                                                                                                                                                                                             ZIP: 02019
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: DIKE, BRONSTEIN, ROBERTS & CUSHMAN
STREET: 130 WATER STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 42 amino acid
TYPE: amino acid
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                              ADDISTREET: LICE STREET: BOSTON CITY: BOSTON MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5, Application US/08986948
o. 5955317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                               Diskette
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Length 42; Indels

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Gaps

0,

FILING DATE: 05-FEBAPPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE: 16-NOV
APPLICATION NUMBER:
FILING DATE: 28-DEC

16-NOV-1993 05-FEB-1993

28-DEC-1993

334773/1993 286985/1993

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US-08-717-551A-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Application US/08717551A Patent No. 6071493
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                            FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: LOYI Y. Beardell
REGISTRATION UNMBER: 34,293
REFERENCE/DOCKET NUMBER: BYIR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEFAX: 617-523-6440
TELEX: 200291 STRE
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 42 aming acids
                TELEFAX: (215) 568-34 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                       OPERATING SYSTEM: PC-DOS
SOFTWARE: WORDPERFECT for WINDOWS 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/717,551A
FILING DATE: Sept-20-96
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Dana Giulian
TITLE OF INVENTION: Identification of Agents that Protect
TITLE OF INVENTION: Against Inflammatory Injury to Neurons
NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: 617-523-3400
TELEPAX: 617-523-6440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FRAGMENT TYPE: 1
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HYPOTHETICAL: NO ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz ADDRESSEE: & No. 6071493ris LLP STREET: One Liberty Place - 46th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 100.
les 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 44631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: DAVID,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                               19103
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NO
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           5) 502
568-3439
5 NO: 2:
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                                                                                      BYLR-0031
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Pred. No. 9.3e-19;
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                                                                                                                                                                                                                                                                                                                                             STORAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 42;
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US-09-388-890-1
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                                                                                                                 US-09-388-890-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence 1, Application US/09388890 Patent No. 6136548
                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 30; Conservative 0
                                                                                    Query Match
                                                                                                                                                                                                                                              TELEFAX: (202) 383-661
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                              FRAGMENT TYPE: |
ORIGINAL SOURCE:
                                                                                                                                                                                        MOLECULE TYPE:
                                                                                                                                                                                                                                                                                          NAME: AUBRBACH, JEFFREY I.
REGISTRATION NUMBER: 32,680
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 383,7451
                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: HOWREY & SIMON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: ANDERSON TITLE OF INVENTION:
                                                                                                                                                                             HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                        Local
                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 20004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: WASHINGTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
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                                                                                                                                ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                    ENGTH:
                                                        30;
                  1 DAEFRHDSGYEVHHQKLVFFABDVGSNKGA 30
                                                                        Similarity
                                                                                                                                                                                                       amino acid
GY: linear
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 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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                                                                                                                                                                                                                                      42 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                          Conservative
                                                                                                                                  AMYLOID PEPTIDE
                                                                                                                                                            N-terminal
                                                                                                                                                                                      peptide
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, 383-6610
, NO: 1:
                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    METHODS FOR THE PREVENTION AND TREATMENT OF VASCULAR HEMORRHAGING AND ALZHEIMER'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STEPHEN
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Pred. No. 9.3e-19;
                                                       Score 162; DB 2;
Pred. No. 9.3e-19;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version #1.25
30
                                                                                    Length 42;
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                                                          Indels
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                                                        Gaps
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                                                        0;
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RESULT 76 US-09-005-215-20 ; Sequence 20, Application US/09005215

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; SEQITWARE: PatentIn Ver.
; SEQ ID NO 23
; LENCTH: 42
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-242-724-23
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US-09-242-724-23

J Sequence 23, Application US/09242724

Fatent No. 6316405

GENERAL INFORMATION:

APPLICANT: Solomon, Michael E.

APPLICANT: Rich, Daniel H.

TITLE OF INVENTION: Cyclosporin A Conjugates and Uses Therefor

FILE REFERENCE: Cyclosporin Analogs
CURRENT APPLICATION NUMBER: US/09/242,724

CURRENT FILING DATE: 1999-02-22

NUMBER OF SEQ ID NOS: 33

SOFTMARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
CLASSIFICATION

PRIOR APPLICATION DATA:
APPLICATION UNMEER: 60/035,847
FILING DATE: 10-JAN-1997
PRIOR APPLICATION UNMEER: 08/960,188
PILING DATE: 29-OCT-1997
ATTORNEY/AGENT INFORMATION:
NAME: Gates, Edward R.
REGISTRATION NUMBER: 31,616
REFERENCE/DOCKET NUMBER: 30-656/7
TELECOMMUNICATION: NIFORMATION:
TELEPHONE: 617-720-3500
TELEPAX: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-005-215-20
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Best Local S
Matches 30
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GENERAL INFORMATION:
APPLICANT: Ingram, Vernon M.
APPLICANT: Blanchard, Barbara J.
APPLICANT: Blanchard, Barbara J.
TITLE OF INVENTION: TREATMENTS FOR NEUROTOXICITY IN ALZHEIMER'S
TITLE OF INVENTION: DISEASE CAUSED BY -AMYLOID PEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/005,215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 30
CORRESPONDENCE ADDRESS: WOLF, GREENFIELD & SACKS,
STREET: 600 ATLANTIC AVENUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 600 ...
CITY: BOSTON
STATE: MASSACHUSETTS
STATE: MASSACHUSETTS
OF AMERICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 100.0%; Score 162; DB 2;
1 Similarity 100.0%; Pred. No. 9.3e-19;
30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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RESULT 79
US-09-660-954-1
; Sequence 1, Application US/09660954
; Patent No. 6471960
; GENERAL INFORMATION:
APPLICANT: ANDERSON, STEPHEN
; APPLICANT: ANDERSON, METHODS FC
; TITLE OF INVENTION: METHODS FC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:

MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
COMPUTER: IBM PS/2
OPERATING SYSTEM: BC-DOS
SOFTWARE: WORDDERFECT for WINDOWS 6.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/922,930
FILING DATE: Sept-03-97
CLASSIFICATION UNMBER: PILLAGION DATA:
PRICK APPLICATION DATA:
APPLICATION NUMBER: BYLR-0039
TELLED DATE: BEARDAIL
NAME: LOT! Y. BEARDAIL
NAME: LOT! Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
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US-08-922-930-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 162; DB 2; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 6451544
GENERAL INFORMATION:
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Best Local
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TITLE OF INVENTION: Against Inflammatory Injury to Neurons
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSE: Woodcock Washburn Kurtz Mackiewicz
ADDRESSE: & No. 6451544ris LLP
STREET: One Liberty Place - 46th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET: One LLCITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30;
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100.0%; Pred. No. 9.3e-19;
tive 0; Mismatches 0;
                           METHODS FOR
OF VASCULAR
                               THE PREVENTION AND TREATMENT HEMORRHAGING AND ALZHEIMER'S DISEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 42;
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NUMBER OF SEQUENCES: 14 CORRESPONDENCE ADDRESS:

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                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence 2, Application US/08923055
Patent No. 6475742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Dana Giulian
TITLE OF INVENTION: Against Inflammatory Injury to Neurons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (202) 383-6(
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
COMPUTER: IBM FO, COMPUTER: IBM FO, COMPUTER: IBM FO, COPERATING SYSTEM: PC-DOS OPERATING SYSTEM: PC-DOS OPERATION GOODERFECT for WINDOWS 6.0 SOFTWARE: WORDER: US/08/923,055
APPLICATION NUMBER: US/08/923,055
APPLICATION NUMBER: US/08/923,055
APPLICATION SEPT-03-97
                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSE: & Noodcock Washburn Kurtz Mackiewicz
ADDRESSEE: & No. 6475742ris LLP
STREET: One Liberty Place - 46th Floor
CITY: Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US/09/388,890
FILING DATE: «Unknown»
APPLICATION NUMBER: 08/686,959
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
NAME: AUERBACH, JEFFREY I.
REGISTRATION NUMBER: 32,680
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 y Match 100.0%;
Local Similarity 100.0%;
hes 30; Conservative (
                                                                                                                                                                                      ZIP: 19103
                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: AMYLOID PEPTIDE SEQUENCE DESCRIPTION: SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FRAGMENT TYPE: N
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 42 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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FILING DATE: 13-Sep-2000
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                              PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: WASHINGTON STATE: D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (202)
TELEFAX: (202) 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: HOWREY & SIMON
STREET: 1299 PENNSYLVANIA AVENUE, N.W.
                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-terminal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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Pred. No. 9.3e-1
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 42;
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                                Query Match
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; TELEFAX: (215) 568-3439
; INFORMATION FOR SEQ ID NO: 2
; SEQUENCE CHARACTERISTICS:
; LENGTH: 42 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-923-055-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 81
US-08-922-889-2
                                  TELEPAX: (215)
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
TENCTH: 42 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/08922889
Patent No. 6475745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Dana G
                                                                                                    NAME: LOTI Y. Beardell
REGISTRATION NUMBER: 3, 293
REFERENCE/DOCKET NUMBER: BYLI
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
TELEFAX: (215) 568-3439
                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Dana Giulian TITLE OF INVENTION: Iden TITLE OF INVENTION: Agai NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                        SOFTWARE: WORDPERFECT for WINDOWS 6.0 CURRENT APPLICATION DATA:
APPLICATION UNBER: US/08/922,889 FILING DATE: Sept-03-97
                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
NAME: Lori Y. Beardell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
MOLECULE TYPE:
             TYPE: ami
                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PS/
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U
ZIP: 19103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz
ADDRESSEE: & No. 6475745ris LLP
STREET: One Liberty Place - 46th Floor
                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REGISTRATION NUMBER: 34,293
REFERENCE/DOCKET NUMBER: BYLR-0038
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Similarity 100.0%; 1
30; Conservative 0;
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                                amino acid
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                                                                                 5) 502
, 568-3439
MO: 2:
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) 568-3439
- NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identification of Agents that Protect Against Inflammatory Injury to Neurons
                                                                                                                                                                                                                                                                                                                                                                                  PC-DOS
                                                                                                                                                               BYLR-0040
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Pred. No. 9.3e-19;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 42;
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<u>,</u>

100.0%;

Score 162;

DB 2;

Length 42;

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RESULT 83

US-09-133-866-2

Sequence 2, Application US/09133866

Petent No. 6600017

GENERAL INFORMATION:

APPLICANT: Glabe, Charles

APPLICANT: Glabe, Charles

TITLE OF INVENTION: FLURESCENT ANYLOID ABETA PEPTIDES AND TITLE OF INVENTION: USES THEREOF

FILE REPERENCE: 50016/002002

CURRENT APPLICATION NUMBER: US/09/133,866

CURRENT APPLICATION NUMBER: 60/055,660

EARLIER APPLICATION NUMBER: 60/055,660

EARLIER FILING DATE: 1997-08-14

NUMBER OF SEQ ID NOS: 2

SOFTWARE: FASTSEQ for Windows Version 3.0

SEQ ID NO 2

LENGTH: 42

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09731460

Patent No. 6495335

GENERAL INFORMATION:
APPLICANT: Chojkier, Mario
APPLICANT: Chojkier, Mario
APPLICANT: Chojkier, Mario
TITLE OF INVENTION: Compositions and Method
TITLE OF INVENTION: Disease
FILE REFERENCE: CHOZKIER-04302
CURRENT PILING DATE: 2000-12-07
KUMBER OF SEQ ID NOS: 1
SOPTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 42
TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
CHUER INFORMATION: Description of Artificial
RESULT 84
US-09-723-384-1
; Sequence 1, Application US/09723384
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US-09-731-460-1
                                                                                                                                                                                               Query Match
Best Local S
Matches 30
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Best Local :
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                                                                                                        1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                          ch 100.0%; Score 162; DB 2; Similarity 100.0%; Pred. No. 9.3e-19; 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 9.3e-19; ); Mismatches 0;
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APPLICANT: Neuralab Limited
APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment of Amyloidoge
FILE REPERENCE: 15270J-004740US
CURRENT APPLICATION NUMBER: US/09/723,384
CURRENT FILLING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 09/322,289
PRIOR FILLING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO
LENGTH: 42
TYPE: PAT
ORGANISM: Homo sapiens
PEATURE:
FORTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-09-723-384-1
                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Schenk, Dale B.
APPLICANT: Sasquez, Nicki
APPLICANT: Vasquez, Nicki
APPLICANT: Yednock, Ted
APPLICANT: Yednock, Ted
TITIE DE INVENTION: Prevention and Treatment of
FILE REFERENCE: 15270J-004750UC
CURRENT APPLICATION NUMBER: US/09/724,961
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 09/580,015
PRIOR APPLICATION NUMBER: US 09/322,289
PRIOR APPLICATION NUMBER: US 09/322,289
PRIOR APPLICATION NUMBER: US 09/201,430
PRIOR FILING DATE: 1999-05-28
PRIOR FILING DATE: 1998-11-30
PRIOR PHOLORATION NUMBER: US 09/201,430
PRIOR PHOLORATION NUMBER: US 00/080,970
PRIOR PHOLORATION NUMBER: US 00/080,970
PRIOR PHOLORATION NUMBER: US 00/080,970
PRIOR PHILING DATE: 1998-04-07
PRIOR PHILING DATE: 1997-12-02
NUMBER: DATE: 1997-12-02
NUMBER: DATE: 1907-12-02
NUMBER: DATE: 1907-12-02
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                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 42

LENGTH: 42

TYPE: PAT

ORGANISM: Homo sapiens

FEATURE:

OTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-09-724-961-42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 85
US-09-724-961-42
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Best Local S
Matches 30
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Best Local Similarity 100
Matches 30; Conservative
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GENERAL INFORMATION:
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L INFORMATION:
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o. 6743427
                                                                                      l Similarity 100 30; Conservative
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                           DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                         100.0%; Score 162; DB 2; 100.0%; Pred. No. 9.3e-19; no. Mismatches 0;
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100.0%; Pred. No. 9.3e-19;
tive 0; Mismatches 0;
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                                                                                                                                    Length
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RESULT 86
US-09-724-552-1
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US-10-455-218-2
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                                                                                                                                                                                                                                                                                                                                 US-09-580-018-42
Sequence 2, Application US/10455218
Patent No. 6770448
GENERAL INFORMATION:
APPLICANT: Glabe, Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 42
LENGTH: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 42, Application US/09580018
Patent No. 6761888
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                     Query Match
Best Local
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Best Local Similarity
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LENGTH: 42
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Patent No. 6750324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Schenk, Dale B.
APPLICANT: Bard, Frederique
APPLICANT: Hard, Frederique
APPLICANT: Yednock, Ted
TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
PILE REFERENCE: 15270J-004760US
CURRENT APPLICATION NUMBER: US/09/580,018
CURRENT FILING DATE: 2000-05-26
CURRENT FILING DATE: 2000-05-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease FILE REFERENCE: 15270J-004740US
CURRENT APPLICATION NUMBER: US/09/724,552
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US/09/580,019A
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 09/322,289
PRIOR PILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 09/322,289
PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Schenk, Dale B. APPLICANT: Neuralab Limit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: human Abeta42 beta-amyloid peptide
                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                     Similarity
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Conservative
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Pred. No. 9.3e-19;
); Mismatches 0;
                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                      DB 2; Length 42;
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RESULT 90
US-09-724-489-1
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; OTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-09-723-927-1
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           GENERAL INFORMATION:
APPLICANT: Schenk, Dale B.
APPLICANT: Neuralab Limited
APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment
FILE REFERENCE: 152704-004720US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; SEQ ID NO 1
; LENGTH: 42
; TYPE: PRT
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 2
                                                                                                                                 Sequence 1, Application US/09724489 Patent No. 6787140
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Patent No. 678713
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TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
FILE REFERENCE: 15270J-004720US
CURRENT APPLICATION NUMBER: US/09/723,927
CURRENT FILING DATE: 2000-11-28
FRIOR APPLICATION NUMBER: US/09/201,430
PRIOR PILING DATE: 1998-11-30
PRIOR FILING DATE: 1998-11-30
PRIOR FILING DATE: 1997-12-02
PRIOR APPLICATION NUMBER: US 60/067,740
PRIOR FILING DATE: 1997-12-02
PRIOR PILING DATE: 1997-12-02
PRIOR FILING DATE: 1998-04-07
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
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CURRENT APPLICATION NUMBER: US/10/455,218
CURRENT FILING DATE: 2003-06-05
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TITLE OF INVENTION: FLUORESCENT AMYLOID ABETA PEPTIDES AND
TITLE OF INVENTION: USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US/09/133,866
PRIOR FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: 60/055,660
PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-14
CURRENT APPLICATION NUMBER: US/09/724,489
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1 Similarity 100.0%;
30; Conservation
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Pred. No. 9.3e-19;
                                            of Amyloidogenic Disease
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CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 09/201,430
PRIOR FILING DATE: 1998-11-30
PRIOR PELICATION NUMBER: US 60/067,740
PRIOR PILING DATE: 1997-12-02
PRIOR PILING DATE: 1998-04-07
NUMBER OF SEQ ID MOS: 5
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID MO 1
SEQ ID MO 1
SEQ ID MOS 1
                                                                                                                                                                                                            RESULT 92
US-09-723-762-1
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; OTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-09-724-489-1
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APPLICANT: Schenk, Dale B.

APPLICANT: Neuralab Limited
APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
FILE REPERENCE: 15270J-004720US
CURRENT FILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US/09/201,430
PRIOR APPLICATION NUMBER: US/09/201,430
PRIOR PRIOR APPLICATION NUMBER: US/09/71,40
PRIOR FILING DATE: 1998-11-30
PRIOR APPLICATION NUMBER: US/0067,740
PRIOR PRIOR TILING DATE: 1998-11-30
PRIOR PRIOR APPLICATION NUMBER: US/0067,740
PRIOR PRIOR DATE: 1998-10-10
PRIOR PILING DATE: 1998-10-10
PRIOR PILING DATE: 1998-04-07
NUMBER: OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1

LENGTH A.
Sequence 1, Application US/09723762
Patent No. 6787144
GENERAL INFORMATION:
APPLICANT: Schenk, Dale B.
APPLICANT: Neuralab Limited
APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
FILE REPERENCE: 15270J-004720US
CURRENT APPLICATION NUMBER: US/09/723,762
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.0%; Score 162; DB 2; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
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Best Local
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ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
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RESULT 94 US-09-724-551-42

Sequence 42, Application US/09724551
Patent No. 6787637
GENERAL INFORMATION:
APPLICANT: Schenk, Dale B.
APPLICANT: Bard, Frederique
APPLICANT: Yednock, Ted
APPLICANT: Yednock, Ted
APPLICANT: Yednock, Ted
APPLICANT: Yednock, Ted
CITTLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
FILE REFERENCE: 15270J-004760US
CURRENT APPLICATION NUMBER: US/09/724,551
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US/09/580,018
PRIOR FILING DATE: 2000-05-26

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APPLICANT: Schenk, Dale B.
APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment of
FILE REFERENCE: 15270J-004720US
CURRENT FILING DATE: 15270J-004720US
CURRENT FILING DATE: 1998-11-30
PRIOR APPLICATION NUMBER: US 60/067,740
PRIOR PILLING DATE: 1997-12-02
PRIOR APPLICATION NUMBER: US 60/080,970
PRIOR PILLING DATE: 1998-04-07
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
1.RNGTH: 42
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; PRIOR FILING DATE: 1998-11-30
; PRIOR APPLICATION NUMBER: US 60/067,740
; PRIOR FILING DATE: 1997-12-02
; PRIOR APPLICATION NUMBER: US 60/080,970
; PRIOR FILING DATE: 1998-04-07
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PATENTIN Ver. 2.1
; SEQ ID NO 1
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                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-09-201-430-1
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US-09-201-430-1
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US-09-723-762-1
                                                                             Query Match 100.0%; Score 162; DB 2;
Best Local Similarity 100.0%; Pred. No. 9.3e-19;
Matches 30; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/09201430 Patent No. 6787523 GENERAL INFORMATION:
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Query Match
100.0%; Score 162; DB 2;
Best Local Similarity 100.0%; Pred. No. 9.3e-19;
Matches 30; Conservative 0; Mismatches 0;
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TYPE: PRT
1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of Amyloidogenic
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GENERAL INFORMATION:
APPLICANT: Chojkier, Mario
APPLICANT: Buck, Martina
ITITLE OF INVENTION: Compositions and Methods
TITLE OF INVENTION: Disease
FILE REFERENCE: CHOJKIER-04302
CURRENT APPLICATION NUMBER: US/10/278,181
CURRENT FILING DATE: 2002-10-21
PRIOR APPLICATION NUMBER: US/09/731,460
PRIOR FILING DATE: 2000-12-07
NUMBER OF SEQ ID NOS: 1
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US-10-815-353-1
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CURRENT APPLICATION NUMBER: US/10/815,353
CURRENT FILING DATE: 2004-03-31
PRIOR APPLICATION NUMBER: US/09/201,430
PRIOR FILING DATE: 1998-11-30
PRIOR FILING DATE: 1998-11-30
PRIOR APPLICATION NUMBER: US 60/067,740
PRIOR FILING DATE: 1997-12-02
PRIOR APPLICATION NUMBER: US 60/080,970
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APPLICANT: Schenk, Dale B.
APPLICANT: Neuralab Limited
                                                                                                                                                                                                                                  Sequence 1, Application US/10278181 Patent No. 6811988
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Patent No. 68087
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Best Local (
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LENGTH: 42
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Best Local S
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SOFTWARE: PatentIn Ver. 2.1
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PRIOR FILING DATE: 1999-05-28
NUMBER OF SEQ ID NOS: 77
SOFTWARE: Patentin Ver. 2.1
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ORGANISM: Homo sapiens
FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
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30; Conservative
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                                                                                                                                                   and Methods
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US-10-816-529-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-10-278-181-1
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Best Local S
Matches 30
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Matches
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NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/10816529 Patent No. 6818218 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                          GENERAL
                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                            Sequence 955, Application US/09623548A
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            APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FRO
TITLE OF INVENTION: COMPONENTS
TITLE OF INVENTION: COMPONENTS
FILE OF INVENTION: COMPONENTS
FILE REFERENCE: 2110
CURRENT APPLICATION NUMBER: US/09/623,548A
CURRENT FILING DATE: 2000-09-05
PRIOR APPLICATION NUMBER: 60/114,406
PRIOR APPLICATION NUMBER: 60/114,406
PRIOR FILING DATE: 1999-05-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/816,529
CURRENT FILING DATE: 2004-03-31
PRIOR APPLICATION NUMBER: US/09/201,430
PRIOR FILING DATE: 1998-11-30
PRIOR APPLICATION NUMBER: US 60/067,740
PRIOR FILING DATE: 1997-12-02
                                                                                                                                                                                                                                        APPLICANT: Conjuchem,
APPLICANT: Bridon, Do
APPLICANT: Ezrin, Ali
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Schenk, Dale B.

APPLICANT: Neuralab Limited
TITLE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease
FILE REFERENCE: 15270J-004720US
                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/080,970
PRIOR APPLICATION NUMBER: 60/153,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT ORGANISM: Artificial Sequence
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Ezrin, Alan
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Pred. No. 9.3e-19;
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APPLICANT: Conjuchem, Inc.
APPLICANT: Bridon, Dominique
APPLICANT: Ezrin, Alan
APPLICANT: Ezrin, Alan
APPLICANT: Holmes, Darren
APPLICANT: Holmes, Darren
APPLICANT: Thibaudeau, Karen
TITLE OF INVENTION: PROTECTION OF ENDOGENOUS THERAPEUTIC PEPTIDES FROM
TITLE OF INVENTION: PEPTIDASE ACTIVITY THROUGH CONJUGATION TO BLOOD
TITLE OF INVENTION: COMPONENTS
FILE REFERENCE: 2110
CURRENT APPLICATION NUMBER: US/09/623,548A
CURRENT FILING DATE: 1999-05-17
PRIOR APPLICATION NUMBER: 60/134,406
PRIOR APPLICATION NUMBER: 60/153,406
PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-01-018
PRIOR FILING DATE: 1999-01-18
SEQ ID NO 988
LENGTH: 42
Type: PAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION: Peptide US-09-623-548A-955
                                                                                                                 RESULT 100
US-10-815-391-1
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US-09-623-548A-988
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PRIOR APPLICATION NUMBER: 60/159,783
PRIOR FILING DATE: 1999-10-18
NUMBER OF SEQ ID NOS: 1617
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 955
LENGTH: 42
TYPE: PRT
Sequence 1, Application US/10815391
Patent No. 6866849
GENERAL INFORMATION:
APPLICANT: Schenk, Dale B.
APPLICANT: Neuralab Limited
                                                                                                                                                                                                                                                                                                 Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 30; Conservative 0:
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GENERAL INFORMATION:
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1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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Pred. No. 9.3e-19;
; Mismatches 0;
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FILE OF INVENTION: Prevention and Treatment of Amyloidogenic Disease FILE REFERENCE: 15270J-004720WS
CURRENT APPLICATION UNDER: US/01/815,391
CURRENT FILING DATE: 2004-03-31
PRIOR APPLICATION NUMBER: US/09/201,430
PRIOR FILING DATE: 1998-11-30
PRIOR PELICATION NUMBER: US 60/067,740
PRIOR PELICATION NUMBER: US 60/067,740
PRIOR PELICHG DATE: 1997-12-02
PRIOR PELICHG DATE: 1998-04-07
PRIOR PELICHG DATE: 1998-04-07
PRIOR PELICHG DATE: 1998-04-07
PRIOR PELICHG DATE: 1998-04-07
PRIOR FILING DATE: 1998-04-07
PRIOR FILING DATE: 1998-04-07
SEQ ID NO 1
SEQ ID NOS: 5
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1
CHARLES PRI
CORGANISM: Homo sapiens
PEATURE:
POTHER INFORMATION: human Abeta42 beta-amyloid peptide
US-10-815-391-1
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                                                                                                  Query Match 100.0%; Score 162; DB 2; Best Local Similarity 100.0%; Pred. No. 9.3e-19; Matches 30; Conservative 0; Mismatches 0;
1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                           Length 42;
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Search completed: April 20, 2006, 10:06:41 Job time : 49 secs

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Maximum Match 100%
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      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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A84262
A49388
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JA0073
A36793
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T23255
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T18161
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probable membrane

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C;Species: Sus scrofa domestica (domestic pig)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
C;Accession: F60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog, A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: F60045
A;Rosesion: F60045
A;Molecule type: mRUN
A;Residues: 1-57 c/OH>
A;Cross-references: UNIPARC:UPI0000125049; EMBL:X56127; NID:g1895; PIDN:CAA39592.1; PID:
C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 c;Species: Cavia porteellus (guinea pig (fragment)
c;Species: Cavia porteellus (guinea pig)
c;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 09-Jul-2004
c;Pacession: PN0512
R;Shimphigashi, Y; Matsumoto, H.; Takano, Y.; Saito, R.; Iwata, T.; Kamiya, H.; O
Biochem. Biophys. Res. Commun. 193, 624-630, 1993
A;Title: Receptor-mediated specific biological activity of a beta-amyloid protein
A;Reference number: PN0512; MUID:93290653; PMID:7685598
A;Accession: PN0512
A;Molecule type: protein
A;Residues: 1-42 <SHIY
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F60045
Alzheimer's
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R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P. Brain Res. Mol. Brain Res. 10, 299-305, 1991
B;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Dascual, R.; Little, S.P. Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: A60045
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A60045
Alzheimer's
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A;Residues: 1-57 </OHA
A;Residues: 1-58 </OHA
A;Cross-references: UNIPARC:UPI0000125049; EMBL:X56125
C;Superfamily: Alzheimer's disease amyloid beta protein; animal
C;Keywords: alternative splicing; Alzheimer's disease; amyloid;
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Best Local S
Matches 30
                                                                                                                                                                                                                                                                                                                                                                lzheimer's disease amyloid beta/A4 protein precursor - pig (fragment)
|Species: Sus scrofa domestica (domestic pig)
|pate: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 13-Aug-1999
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100.0%; Pred. No. 2.8e-17;
tive 0; Mismatches 0;
   100.0%;
   Score 162;
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                                                                                                                                                                                RESULT 6

G60045

Alzheimer's disease amyloid beta/A4 protein precursor - guinea pig (fragment)
C/species: Cavia porcellus (guinea pig)
C/species: Cavia porcellus (guinea pig)
C/pate: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 28-Jul-1995
C/Accession: G60045
C/Accession: G60045
C/Accession: G60045
C/Accession: G60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P. Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide A;Reference number: A60045, MUID:92017079; PMID:1656157
A;Accession: G60045
A;Residues: 1-57 <JOH>
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E600%3
Alzheimer's disease amy...
Alzheimer's disease amy...
C;Species: Ovis sp. (sheep)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #tea._...
C;Accession: E60045
R;JOhnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
R;JOhnstone, E.M.; Chaney, M.O.; 299-305, 1991
Brain Res. Mol. Brain Res. 10, 299-305, 1991
Brain Res. Mol. Brain res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid
A;Reference number: A60045; MUID:92017079; PMID:1656157
A:Accession: E60045
A:Accession: E60045
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D60045

Alzheimer's disease amyloid beta/A4 protein precursor - bovine (fragment)
Alzheimer's disease amyloid beta/A4 protein precursor - bovine (fragment)
C;Specises: Bos primigenius taurus (Cattle)
C;Specises: Bos primigenius taurus (Oattle)
C;Date: 001-Dec-1992 #sequence_revision 001-Dec-1992 #text_change 28-Jul-19:
C;Accession: D60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid J
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: D60045
                                                                                                                                                                  A;Molecule type: mRNA
A;Residues: 1-57 <JOHs
A;Residues: 1-58 < JOHs
A;Cross-references: UNIPARC:UPI0000125049; EMBL:X56130
C;Superfamily: Alzheimer's disease amyloid beta protein;
C;Keywords: alternative splicing; Alzheimer's disease; an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPARC:UPI0000125049; EMBL:X56124 C;Superfamily: Alzheimer's disease amyloid beta protein; C;Keywords: alternative splicing; Alzheimer's disease; an
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A; Residues: 1-57 < JOH>
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30; Conservative
  DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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                                                                                                          100.0%;
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                                                                                                            Score 162; DB 2;
Pred. No. 3.9e-17;
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brain
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A;Cross-references: UNIPARC:UPI0000125049; EMBL:X56126 C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type C;Keywords: alternative splicing; Alzheimer's disease; amyloid; brain

proteinase

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Alzheimer's
C;Species: O
C;Date: 30-S
C;Accession:
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C;Species: Ursus maritimus (polar bear)
C;Decies: Ursus maritimus (polar bear)
C;Decies: Ursus maritimus (polar bear)
C;Date: 01-Dec-1992 #sequence_revision 01-Dec-1992 #text_change 09-Jul-2004
C;Accession: B60045
R;Johnstone, E.M.; Chaney, M.O.; Norris, F.H.; Pascual, R.; Little, S.P.
Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog,
A;Reference number: A60045; MUID:92017079; PMID:1656157
A;Accession: B60045
A;Accession: B60045
A;Molecule type: mRNA
A;Residuce; 1-57 - JOH-
A;Residuce; 1-57 - JOH-
A;Residuces: 1-57 - JOH-
A;Cross-references: UNIPROT:Q29149; UNIPARC:UPI0000125049; EMBL:X56128; NID:92165; PIDN:
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase i
C;Superfamily: Alzheimer's disease; amyloid; brain
                                                                                                                                                                                                                                                                                                                                                                                                             A;Cross-references: UNIPARC:UPI000016A551; GB:M83558; GB:M83657 R;Johnstone, E.M.; Chamey, M.O.; Norris, F.H.; Pascual, R.; Litt Brain Res. Mol. Brain Res. 10, 299-305, 1991
A;Title: Conservation of the sequence of the Alzheimer's disease A;Reference number: A60045; MUID:92017079; PMID:1656157 A;Accession: C60045
A;Receule type: mRNA A;Residues: 12-68 <UNIV.
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A; Residues: 1-82 < DAV>
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Best Local S
Matches 30
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;Species: Oryccolagus cuniculus (domestic rabbit)
;Date: 30-Sep-1993 #sequence_revision 19-Oct-1995 #text_change 19-Oct-1995
;Accession: PQ0438; C60045
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   DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                   DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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100.0%; Pred. No. 3.9e-17;
tive 0; Mismatches 0;
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Pred. No. 5.8e-17;
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Pred. No. 3.9e-17;
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   46
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Down's syndrome
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A49795
Alzheimer's d
C;Species: Ma
C;Date: 10-Se
C;Accession:
                                                                                                                                                    A;Molecule type: mRNA
A;Residues: 1-695 <POD>
A;Residues: 1-695 <POD>
A;Crose-references: UNIPARC:UPI000002A2F2; GB:M58727; NID:g342062; PIDN:AAA36829.1; PI
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kunitz-type proteinase
C;Keywords: alternative splicing
片
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                                                                                                                                                                                                                                                                                                     R;Podlisny, M.B.; Tolan, D.R.; Selkoe, D.J.
Am. J. Pathol. 138, 1423-1435, 1991
A;Title: Homology of the amyloid beta protein precursor
A;Reference number: A49795; MUID:91273117; PMID:1905108
                                                                                                                                                                                                                                                                   A;Status: preliminary
                                                                                                                                                                                                                                                                                        A; Accession: A49795
                                                                                                    Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                        laheimer's disease amyloid beta protein precursor - crab-eating macaque;

Species: Macaca fascicularis (crab-eating macaque)

Date: 10-Sep-199 #sequence_revision 10-Sep-1999 #text_change 10-Sep-199;
Accession: A49795
                                                                                Matches
597
                     1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                30;
                                                                                                    Similarity
DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                              Conservative
                                                                                                 100.0%;
                                                                                                                       100.0%;
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                                                                                                 Score 162; DB 1;
Pred. No. 6.2e-16;
                                                                                Mismatches
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                                                                                                                       Length 695;
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                                                                            Gaps
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g)

Alzheimer's disease amyloid beta protein precursor [validated] - human N;Alternate names: Alzheimer's disease amyloid A4 protein; coagulation factor XIa inhi N;Contains: amyloid beta protein long, plaque form; amyloid beta protein short, vascul protein precursor splice form APP(770) [7.Species: Homo sapiens (man) [7.Species: Homo sapiens (man) [7.Species: Homo sapiens (man) [7.Species: S02260; S05194; A32277; A33260; A35486; I39452; I39451; I39453; I59562; A 4668; A28583; A29302; A60805; J10308; S06121; A60355; A59011; A38384; S29076; S38252; A 4668; A28583; A29302; A60805; J10308; S06121; A60355; A59011; A38384; S29076; S38252; R;Lemaire, H.G.; Salbaum, J.M.; Multhaup, G.; Kang, J.; Bayney, R.M.; Unterbeck, A.; B Nucleic Acids Res. 17, 517-522, 1989
Nucleic Acids Res. 17, 517-522, 1989 QRHUA4

A; Reference number: A; Accession: S02260 695) precursor protein of Alzheimer's S02260; MUID:89128427; PMID:2783775

A; Molecule type: DNA A; Residues: 1-288,'V',365-770 < LEM1>

A; Note: alternative splice A; Cross-references: UNIPARC: UPI000002A2F2; form APP(695) EMBL: X13466

R;Lemaire, H.G. submitted to the EMBL Data Library, November a:Reference number: S05194

A;Reference number: S05194

A;Accession: S05194

A;Molecule type: DNA

A;Residues: 1-14, VW', 17-288, VV', 365-770 <LEW2>

A;Cross-references: UNIPARC:UPI000016AEFC; EMBL:X13466; NID:g35598; PIDIA; Residues: 1-14, VW', 17-288, VV', 365-770 <LEW2>

A;Cross-references: UNIPARC:UPI000016AEFC; EMBL:X13466; NID:g35598; PIDIA; NIO-te: alternative splice form APP(695)

A;Note: alternative splice form APP(695)

R;La Fauci, G.; Lahiri, D.K.; Salton, S.R.J.; Robakis, N.K.

Biochem. Biophys. Res. Commun. 159, 297-304, 1989

A;Title: Characterization of the 5'-end region and the first two exons of the state of the state

exons

of.

the beta-pro

PIDN:CAA31830.1;

A;Residues: 1-75 <LAF>
A;Cross-references: UNIPARC:UPI000016A57D; GB:M24546; GB
R;Chinstone, E.M.; Chaney, M.O.; Moore, R.B.; Ward, K.E.
Biochem. Biophys. Res. Commun. 163, 1248-1255, 1389
A;Title: Alzheimer's disease amyloid peptide is encoded
A;Reference number: A33260; MUID:89392030; PMID:2675837
A;Accession: A33260 K.E.; GB:M24547; NID:g341202; E.; Norris, F.H.; Littl

Little, shows

PIDN:AAC e, S.P. similar

two exons

γģ

A;Molecule type: DNA A;Residues: 656-737 <JOH>

A;Cross-references: UNIPARC:UPI000016A551; GB:M29270; NID:g178863; PIDN:AAA51768.1; R;Prelli, F.; Levy, E.; van Duinen, S.G.; Bocts, G.T.A.M.; Luyendijk, W.; Prangione, Biochem. Biophys. Res. Commun. 170, 301-30, 1990
A;Title: Expression of a normal and variant Alzheimer's beta-protein gene in amyloic B.

amyloid 9

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A) Residues: 672-710 CFREI.

A) Residues: 672-710 CFREI.

A) Cross-references: UNIPARCIDETORODISTS

A) Floribei. S. I. Sasaki, H.; DDh.ura, K.; Phruya, H.; Sakaki, Y.

A) Fills: Genomic organization of the human amyloid bet-pretein precursor gene.

A) Fills: Genomic organization of the human amyloid bet-pretein precursor gene.

A) Fills: Genomic organization of the human amyloid bet-pretein precursor gene.

A) Fills: Genomic organization of the human amyloid bet-pretein precursor gene.

A) Fills: Genomic organization of the human amyloid bet-pretein precursor gene.

A) Fills: Genomic organization of the Aboun; translation not shown; translated from GB/BMI

A) Fills: Genomic organization of the Aboun; translation not shown; translated from GB/BMI

A) Fills: Genomic organization of the Aboun; translation not shown; translated from GB/BMI

A) Fills: Mills: S. I.; Sasaki, H.; Dohlura, K.; Peruya, H.; Sakaki, Y.

A) Cross-references: UNIPARCIUPIONOSIASIF; GE:M4875; NID:9178618; PIDN:AMB59501.1; PID:

A) Fills: Mills: AD mills: Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills:Mills
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;Accession: A35486
;Molecule type: DNA
;Residues: 672-710 <PRE1>
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A, CCOSE, FERENCES; DILPAK; IPLIOUDIA4CHS; GERMIS-JAF, SE GEOTGE-MYSIO, J. FLAN RAMASSAV. J. FLAN RAMA
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A;Residues: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rosidues: 284-288,'V', 365-646,'E',648-770 <ROB>
A;Rote: the authors translated the codon GAG for residue 647 as Asp R;Goldgaber, D.; Lerman, M.I.; McBride, O.W.; Saffiotti, U.; Gajdusek, Science 235, 877-880, 1987
A;Title: Characterization and chromosomal localization of a cDNA encod. A;Reference number: A47584, MUID:87120328; PMID:3810169
A;Recession: A47584
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A;Residues: 674-756,'S', 758-770 <GOL>
A;Cross-references: UNIPARC:UPI00001420E5; GB:M15533; NID:g178706; PIDN:AAA35540.1; PID
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A; Molecule type: mRNA
A; Residues: 1-210, 'G', 212-220, 'S', 222-396, 'A', 398-402, 'T', 404-448, 'A', 450-695
A; Cross-references: UNIPARC:UPI00002A2F9; EMBL:X59379
R; Izumi, R.; Yamada, T.; Yoshikai, S.; Sasaki, H.; Hattori, M.; Sakaki, Y.
Gene 112, 189-195, 1992
A; Title: Positive and negative regulatory elements for the expression of the A
A; Reference number: 149485; MUID:92209998; PMID:1555768
A; Accession: 149485
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A27485
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C;Date: 31-Mar-1989 #sequence revision 31-Mar-1989
C;Accession: A27485; S19727; T49485
R;Yamada, T.; Sasaki, H.; Furuya, H.; Miyata, T.; G
RESULT 12
$00550
Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biochim. Biophys. Acta 1129, 141-143, 1991
A;Title: The amyloid beta protein precursor or proteinase
A;Reference number: S19727; MUID:92096458; PMID:1756177
A;Accession: S19727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Biochem. Biophys. Res. Commun. 149, 665-671, 1987 A; Title: Complementary DNA for the mouse homolog of the A; Reference number: A27485; MUID:88106489; PMID:3322280
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A; Residues: 1-19 < RES>
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R, de Strooper, B.; van Leuven, F.; van den Berghe,
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A;Title: Molecular cloning of amyloid cDNA derived from mRNA of the Alzheimer disease b A;Reference number: A31087; MUID:88124954; PMID:2893379
A;Accession: A31087
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A;Cross-references: UNIPARC:UPI0000174094
A;Accession: C30320
A;Status: not compared with conceptual tr:
A;Molecule type: mRNA
A;Residues: 606-770 <VIT3>
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Best Local S
Matches 27
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Pred. No. 6.9e-16;
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Alzheimer's disease amyloid beta protein precursor - C;Specites: Kenopus laevis (African clawed frog) C;Date: 10-Jun-1993 #sequence_revision 10-Jun-1993 #t C;Accession: JH0773 R;Okado, H; Okamoto, H.
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A;Status: preliminary
A;Molecule type: protein
A;Residues: 18-32 <POTS
A;Cross-references: UNIPARC:UPI00001777FE
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A;Title: The beta-A4 amyloid precursor protein binding to coppe: A;Reference number: S46251; MUID:94320627; PMID:7913895

A;Contents: annotation; copper binding sites
A;Note: rat peptides were isolated but not sequenced R;Potempska, A.; Styles, J.; Mehta, P.; Kim, K.S.; Miller, D.L. J. Biol. Chem. 266, 864-8469, 1991
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R;Schubert, D.; Schroeder, R.; LaCorblere, M.; Survey, -...
Science 241, 223-226, 1988
Science 241, 242-226, 1988
Science 2
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C;Species: Rattus norvegicus (Norway zat)
C;Date: 30-Jun-1989 #sequence revision 30-Jun-1989 #text_change 09-Jul-2004
C;Accession: S00550; A41245; A39820; S46251
C;Accession: S00550; A41245, A39820; S46251
C;Rishivers, B.D.; Hilbich, C.; Multhaup, G.; Salbaum, M.; Beyreuther, K.; Se
                                                                                                                                                          A,Experimental source: larva
C;Superfamily: Alzheimer's disease amyloid beta protein; animal Kur
C;Keywords: alternative splicing; amyloid
F;287-337/Domain: animal Kunitz-type proteinase inhibitor homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Biochem. Biophys. Res. Commun. 189, 1561-1568, 1992
A;Title: A Xenopus homologue of the human beta-amyloid
A;Reference number: JH0773; MUID:93129227; PMID:1282805
A;Accession: JH0773
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A;Title: Purification and tissue level of the beta-amyloid A;Reference number: A39820; MUID:91217087; PMID:1673681
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A;Title: Alzheiner's disease amyloidogenic glycoprotein:
A;Reference number: S00550; MUID:88312583; PMID:2900758
A;Accession: S00550
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A;Residues: 1-747 <OKA>
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A;Regidues: 18-37,'X',39-40,'X',42-44 <SCH>
A;Cross-references: UNIPARC:UPI00001777FD
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A;Accession: A41245
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Score 143; DB
Pred. No. 4.5e
4; Mismatches
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Pred. No. 4.1e-13;
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Cole, G.
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                                                                                                                                                                                 <BPI>
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                                                                                                                                                                                                                                                              proteinase
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RESULT 14

$23094 protein precursor - rat
c;Species: Rattus norvegicus (Norway rat)
C;Species: Rattus norvegicus (Norway rat)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change
C;Accession: $23094
R;Kojima, S; Omori, M.
FEBS Lett. 304, 57-60, 1992
A;Title: Two-way cleavage of beta-amyloid protein precursor by A;Accession: $23094
A;Accession: $23094
                                                                                                                                                                                                                                                                                                                                                                                   submitted to the EMBL Data Library, July 1990

A;Reference number: S11549
A;Recession: S11549
A;Residues: 1-90, 'E',92-327 <ZHO2>
A;Residues: 1-90, 'E',92-327 <ZHO2>
A;Residues: 1-90, 'E',92-327 <ZHO2>
A;Cross-references: UNIPARC:UPI0000131E66; EMBL:X54058; NID:g61219; PIDN:CAA37993.1; PID R;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Ohshima, K.; Hateya, T.; Sano, T.; Inoue, A.K.; Shikata, E.
A;Areference number: Jon. Soc. Jpn. 57, 615-622, 1991
A;Reference number: JC1526
A;Arcession: JC1526

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C;Species: potato virus Y, PVY
C;Date: 19-May-1994 #sequence revision 19-May-1994 #text_change 09-Jul-2004
C;Date: 19-May-1994 #sequence revision 19-May-1994 #text_change 09-Jul-2004
C;Accession: S11435; S11549; JC1526
R;Zhou, X.R.; Fang, R.X.; Wang, C.Q.; Mang, K.Q.
Nucleic Acids Res. 18, 5554, 1990
Nucleic Acids Res. 18, 5554, 1990
A;Title: CDNA sequence of the 3'-coding region of PVY genome (the Chinese i. A;Reference number: S11435; MUID:91016851; PMID:2216735
A;Accession: S11435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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                                                                                                                                                                                                                          A;Start codon: GCA
C;Superfamily: tobacco etch virus genome polyprotein
C;Keywords: coat protein; polyprotein
F;61-327/Product: coat protein #status predicted <COP>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genome polyprotein - N; Contains: coat prot
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A;Residues: 1-33 <KOJ>
A;Cross-references: UNIPARC:UPI00001777FB
C;Superfamily: Alzheimer's disease amyloid beta protein; animal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R;Zhou,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-327 < ZHO1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: UNIPROT:P21294; UNIPARC:UPI000017871F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 25
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1 DAEFRHDSGYEVHHQKLVFFAED----VGSNK 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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llarity 89.3%;
Conservative
                                                                                                       35.2%;
larity 53.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  potato virus Y (fragment)
cein; NIb protein
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                                                                                               Score 57; DB 2; Length 327; Pred. No. 1.1; 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 133; DB 2;
pred. No. 4.3e-13;
1; Mismatches 2
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                                                                                                           10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                genome polyprotein - potato virus Y (strain o) N;Contains: coat protein; replicase C;Species: potato virus Y, PVY C;Date: 07-Jun-1900 #sequence_revision 07-Jun-1C;Accession: S04723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
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A;Accession: PS0317
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Best Local S
Matches 17
                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  l Similarity
17; Conserv
                                      ch 33.3%;
l Similarity 50.0%;
16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34.0%;
                                                 Score 54; DB
Pred. No. 2.6
l; Mismatches
                                                                                                               2
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N,Contains: 31K protein; 38K protein; capsid protein; cytoplasmic inclusion protolymerase (EC 2.7.7.48) core, nuclear inclusion protein a
C;Species: potato virus Y, PV
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 02-Feb-2001
C;Accession: JS0166; PS0317
R;Robaglia, C.; Durand-Tardif, M.; Tronchet, M.; Boudazin, G.; Astier-Manifacier,
J. Gen. Virol. 70, 935-947, 1989
A;Title: Nucleotide sequence of potato virus Y (N strain) genomic RNA.
A;Reference number: JS0166; MUID:89279275; PMID:2732709
A;Residues: 1-3063 <ROB>
A;Cross-reference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; McCession: Fool;
A; McCession: Fool;
A; Modeleule type: protein
A; Modeleule type: protein
A; Residues: 1158-1163;2797-2812;0,0,2814-2816 <RO2>
A; Cross-references: UNIPARC: UPTO000178735
C; Superfamily: tobacco etch virus genome polyprotein
C; Keywords: ATP; cysteine proteinase; genome-linked protein; glycoprotein; protein at status predicted <AIK>
F; 12-275; Product: 31K protein at status predicted <AIK>
F; 276-824/Product: gly protein at status predicted <AIK>
F; 309-340/Region: zinc binding at status predicted <AIK>
F; 158-1791/Product: cytoplasmic inclusion protein at status predicted <AIK>
F; 1158-1791/Product: cytoplasmic inclusion protein at status predicted <CIP>
F; 1327-1332/Region: nucleotide-binding motif B
F; 1331-1334/Region: nucleotide-binding motif B
F; 1379-1843/Product: genome-linked protein at status predicted <AIR>
F; 1797-1803/Product: nuclear inclusion protein at status predicted <AIR>
F; 2797-3063/Product: capsid protein at status predicted <AIR>
F; 450,744/Binding site: phosphoryl-RNA (Tyr) (covalent) at status predicted
F; 1907/Binding site: phosphoryl-RNA (Tyr) (covalent) at status predicted
F; 1918/Active site: Cys, His #status predicted
F; 1918/Active site: Cys, His #status predicted
                                                                                                                                                                                                                            R;Bravo-Almonacid, F.; Mentaberry, A.N.

Nucleic Acids Res. 17, 4401, 1989

A;Title: Nucleotide cDNA sequence coding for the PVYo coat protein.

A;Reference number: S04723; MUID:89296509; PMID:2740238

A;Accession: S04723

A;Status: translation not shown

A;Molecule type: genomic RNA

A;Residues: 1-284 <BRA>
                                                                                                                        A;Cross-references: UNIPROT:p11897; UNIPARC:UPI0000131E6A; EMBL:X14136; NID:g61445; PIFC;Superfamily: tobacco etch virus genome polyprotein
C;Keywords: polyprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Durand-Tardif, M.; Tronchet, M.; Boudazin, G.; Astier-Manifacier, 70, 935-947, 1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 55; DB 2; Length 3063; Pred. No. 26; O; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-Jun-1990 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (fragment)
                                                          Length 284;
Indels
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10;
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Gaps
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A;Gene: F1M20.24
A;Map position:
C;Superfamily: F
RESULT 20
JT0959
polyprotein
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Nature 408, 816-820, 2000
A; Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, F. Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A; Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A; Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A; Reference number: A86141; MUID:21016719; PMID:11130712
A; Accession: G96774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Accession: G96774
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; Wirtheologis, A.; Ecker, J.R.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Accession: D70128
C;Accession: D70128
R;Fraser, C.M.; Casjens, S.; Huang, W.M.; Sutton, G.G.; Clayton, R.; Lathigra, R.; son, D.; Peterson, J.; Kerlavage, A.R.; Quackenbush, J.; Salzberg, S.; Hanson, M.; son, D.; Poterson, J.; Kerlavage, A.R.; Quackenbush, J.; Salzberg, S.; Hanson, M.; Bowman, C.; Garland, S.; Fujii, C.; Cotton, M.D.; Horst, K.; Roberts, K.; Hatch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-reterences: VALLER B31
A;Experimental source: strain B31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nature 390, 580-586, 1997
A;Authors: Smith, H.O.; Venter, J.C.
A;Title: Genomic sequence of a Lyme disease spirochaete,
A;Tster Genomic sequence,
A;Reference number: A70100; MUID:98065943; PMID:9403685
A;Accession: D70128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      conserved hypothetical protein BB0228 - Lyme disease spirochete C;Species: Borrelia burgdorferi (Lyme disease spirochete) C;Date: 13-Feb-1998 #sequence_revision 13-Feb-1998 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein F1M20.24 [imported] - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 05-Oct-2004
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A; Residues: 1-256 <STO>
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A; Residues: 1-971 <KLE>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                          Gene: F1M20.24
                                                                                                                                                                                                                                                                                                                                                                                                                    Cross-references: UNIPROT:Q9CA59; UNIPARC:UPI00000A6660; GB:AE005173; NID:g6539258;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DAEFRHDSGYEVHHQKLVFFAEDV----GSNK 28
     potato virus
                                                                                                                           DAQHKEDAGDEIHDEVADIIKEDLWSN 218
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     Y (fragment)
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                                                                                                                                                                                                                     Score 53; DB Pred. No. 3.3; 6; Mismatches
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reasy, T.H.;
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Maiti, R.;
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ewar, K.;
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R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Hamris, D.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Hc Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S. Nature 393, 537-544, 1998
A;Authors: Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Title: Deciphering the biology of Mycobacterium tuberculosis from the complet A;Reference number: A70500; MUID:98295987; PMID:9634230
A;Accession: F70979
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hypothetical protein RV32// Pyrocure.

C;Species: Mycobacterium tuberculosis

C;Species: Mycobacterium tuberculosis

C;Date: 17-Uul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004

C;Date: 17-Uul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004

C;Accession: F70979

Parkhill. J.; Garnier, T.; Churcher, C.; Harris, N.; Churcher, C.; Harris, C.; Churcher, C.; Harris, C.; Churcher, C.; Harris, C.; Churcher, C.; Chur
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A; Experimental source: strain ordinary
C; Superfamily: tobacco etch virus genome polyprotein
C; Keywords: genome-linked protein; hydrolase; nucleotide bindin
F;1-285; Product: cytoplasmic inclusion body (fragment) #status
F;286-337/Product: 5K protein #status predicted <5KP>
F;286-337/Product: proteinase #status predicted <7RO>
F;338-769/Product: proteinase #status predicted <7RO>
F;338-769/Product: RNA polymerase #status predicted <7RNA>
F;1289-1555/Product: coat protein #status predicted <7RNA>
F;1289-1555/Product: coat protein #status predicted <7RNA>
R;Lu, Y.P.; Wang, C.Q.; Bi, Y.P.; M
Sci. Sin. B Chem. Biol. Agric. Med.
A;Title: Molecular cloning, sequenc
                                                                                                                                                                                      nuclear inclusion body b - pota
N;Alternate names: Nib protein
C;Species: potato virus Y, PVY
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                                                                                                                  C;Date: 18-Apr-1996 #sequence_revision
C;Accession: PC1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPROT:P96882; UNIPARC:UPI00000CCCOF; GB:Z92771; GB:AL123456; A;Experimental source: strain H37Rv
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A; Residues: 1-272 <C
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A; Residues: 1-1555 < HID>
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Matches 10
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                                       C.Q.; Bi, Y.P.; Mi, J.J.
Biol. Agric. Med. Earth Sci.
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; Pred. No. 24;
0; Mismatches
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       analysis
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predicted <CYT>
                                                                                                                                                              31-Dec-2004
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C;Species: Pseudomonas stutzeri Circulture C;Species: Pseudomonas stutzeri Pseudomonas stutzeri C;Species: Pseudomonas stutzeri 
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$27652
$probable aldehyde dehydrogenase (NAD) (EC 1.2.1.3)
C;Species: Pseudomonas sp.
C;Date: 06-Jan-1995 #sequence routh
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C;Steries: Decidomonas sp.
C;Cate: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: C42971, $27552
C;Accession: C42971, $27552
J: Piterson, J.A.; Lu, J.Y.; Geisselsoder, J.; Graham-Lorence, S.; Carmona, C.; Witney, F.
J. Biol. Chem. 267, 14193-14203, 1992
A;Title: Cytochrome P-450terp. Isolation and purification of the protein and cloning and A;Reference number: A42971; MUID:92332528; PMID:1629218
A;Accession: C42971
A;Status: preliminary; not compared with conceptual translation
A;Accession: C42971
A;Status: preliminary; not compared with conceptual translation
A;Accession: C42971
A;Cross-references: UNIPROT:P33008; UNIPARC:UPI000012928E; EMBL:M91440; NID:g151584; PID
A;Accession: 1-488 c/EET*
A;Cross-references: UNIPROT:P33008; UNIPARC:UPI000012928E; EMBL:M91440; NID:g151584; PID
A;Note: sequence extracted from NCBI backbone (NCBIP:108473)
C;Keywords: NAD; oxidoreductase
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A;Molecule type: mRNA
A;Residues: 1-519 <LUY>
A;Cross-references: UNIPROT:Q8JJZ2; UNIPROT:072606; UNIPROT:Q85105; UNIPROT:Q85274; UNII
A;Experimental source: N strain
C;Genetics:
A;Gene: Nib
                                                                                                                                                   A;Molecule type: protein
A;Residues: 1-36 <WEE>
A;Cross-references: UNIPARC:UPI00001751BD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 24
A43938
Pseudomonas cytochrome oxidase (EC 1.9.3.2) - Pseudomonas stutzeri (strain JM300)
N;Alternate names: cytochrome cdl; heme-type nitrite reductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
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;Gene: nirs;
;Superfamily: Pseudomonas;
.Kevwords: Chromoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 12
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Best Local Similarity
Matches 11; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |:| || || :|::| || || |
|HESIYEAFRDKLVAYAQNVVIGDGSQPG 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HDSGYEVHHQKLVFFAEDV----GSNKG
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llarity 73.3%;
Conservative
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                       cytochrome oxidase;
electron transfer; l
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Pred. No. 26;
4; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29
                       cytochrome c6 homology heme; heterodimer; iron;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
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RESULT 25
A34287
A54287
Storage protein 2 - silkworm
C;Species: Bombyx mori (silkworm)
C;Species: Bombyx mori (silkworm)
C;Date: 08-Jun-1990 #sequence_revision 08-Jun-1990 #text_char
C;Accession: A34287
R;Fujii, T; Sakurai, H; Izumi, S; Tomino, S.
J Biol: Chem. 264, 11020-11025, 1989
A;Title: Structure of the gene for the arylphorin-type storac
A;Reference number: A34287; MUID:89291839; PMID:2544581
A;Accession: A34287
A;Status: prellminary
A;Molecule type: DNA
A;Residues: 1-704 <FUJ>
A;Cross-references: UNIPROT:P20613; UNIPARC:UPI000017887B
C;Superfamily: arylphorin
                                                      RESULT 27
S59499
cellulase egl1 - smut fungus (Ustilago C;Species: Ustilago maydis (corn smut) C;Date: 20-Uul-1996 #sequence_revision C;Accession: S59499
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Coat protein precursor - pepper mottle virus
C;Species: pepper mottle virus
C;Date: 09-Sep-1987 #sequence_revision 09-Sep-1987 #text_change 09-Jul-2004
C;Accession: A26205
R;Dougherty, W.G.; Allison, R.F.; Parks, T.D.; Johnston, R.E.; Feild, M.J.; Armstrong, Virology 146, 282-291, 1985
A;Title: Nucleotide sequence at the 3' terminus of pepper mottle virus genomic RNA: evi
A;Reference number: A26205
R;Schauwecker, F.; Wanner, G.; Kahmann, Biol. Chem. Hoppe-Seyler 376, 617-625, 1 A;Title: Filament-specific expression of
                                                                                                                                                                                                               밁
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C;Superfamily: tobacco etch virus genome polyprotein
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F;21,24/Binding site: heme (Cys) (covalent) #status predicted
F;25/Binding site: heme iron (His) (axial ligand) #status predicted
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                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: genomic RNA
A; Residues: 1-330 < DOU>
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Best Local S
Matches 11
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Best Local S
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Best Local Similarity 44.4%;
Matches 8; Conservative
                                                                                                                                                                                                                                                                                          Matches
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                                                                                                                                                                                                               63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the 3' terminus of pepper mottle virus genomic RNA: evi
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Pred. No. 39;
3; Mismatches
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Pred. No. 20;
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                                                                            13-Mar-1997
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39;
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                                                                          #text_change
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C;Accession: B34434
R;Willott, E.; Wang, X.Y.; Wells, M.A.
J. Biol. Chem. 264, 19052-19059, 1989
A;Title: cDNA and gene sequence of Manduca
A;Reference number: A34434; MUID:90037032;
A;Accession: B34434
                                                                                                                                                                                                                                                                                                                                                                  arylphorin beta chain precursor - tobacco hornworm C;Species: Manduca sexta (tobacco hornworm) C;Date: 15-Jun-1990 #sequence_revision 15-Jun-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AD2250
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-547 < XUR>
A;Cross-references: UNIPROT:08YR93; UNIPARC:UPI00000CE826; GB:BA000019;
A;Experimental source: strain PCC 7120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA Res. 8, 205-213, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium Ans
A:Reference number: AB1807; MUID:21595285; PMID:11759840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Nostoc sp. PCC 7120
A;Notc: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 31-Dec-2004
C;Accession: AD2250
C;Accession: AD2250
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.;
Nakazaki, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Yasuda, M.; Tona Boo a 206-211 200.
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AD2250
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A;Accession: S59499
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-393 <SCH>
A;Cross-references: UNIPROT:P54424; UNIPARC:UPI000012BDAF; GB:S81598; NID:g1478378;
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Best Local S
Matches 10
                                                                                                                                                                                                          ;Molecule type: DNA ;Residues: 1-703 <WIL>
                                                                                                                                                                            Superfamily: arylphorin;
                                                                                                                                                                                                                                                  Status: preliminary
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                                                                                                          Matches
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Best Local
                                                                                                                                                                                             Cross-references: UNIPROT:P14297; UNIPARC:UPI00001260D7; EMBL:M28395;
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                                    ANYSNSLVYNNEEQRLSYFTEDIGLN 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QYANDDGYPIKPQKLIYDLRQVMGPDDIVISDVGAHK 383
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                                                                     AEFRHDSGYEVHHOKLVFFAEDVGSN
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llarity 27.0%;
Conservative
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                                                                                                      ; Score 48; DB;
; Pred. No. 55;
5; Mismatches
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Pred. No. 39
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5; Mismatches
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                                                                                                                                                                                                                                                                                   sexta arylphorin,
pmID:2808410
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T18161
submitted to the EMBL Data A; Reference number: Z18806 A; Accession: T18161
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                                                       R;Graves, M.V.; Van Etten,
                                                                                                                                                                                                                                                                                                                                                       A; Map position: 2
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A; Residues: 1-175 <HEI>
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A; Residues: 1-1573 < KUR>
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hypothetical protein A659L - Chlorella virus PBCV-1
C;Species: Chlorella virus PBCV-1
C;Date: 15-Oct.1999 #sequence_revision 15-Oct.1999
C;Accession: T18161
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Nature 406, 477-483, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    conserved hypothetical protein VCA0208 [imported] - Vibrio cholerae (strain N16961 C;Species: Vibrio cholerae (C;Species: Vibrio cholerae (C;Species: Vibrio cholerae (C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004 C;Accession: F82486
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C;Accession: AF3514
C;Accession: AF3514
C;Accession: AF3514
V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; I R,Delvecchio, V.G.; Kapatral, V.; Redkar, R.J.; Patra, G.; Mujer, C.; Los, T.; I R,Delvecchio, V.G.; Kapatral, V.; Elzer, P.H.; Hagius, S.; O'Callaghan, D. Proc. Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A;Title: The genome sequence of the facultative intracellular pathogen Brucella A;Reference number: AD3252; PMID:11756688
A;Accession: AF3514
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Title: DNA Sequence of both chromosomes of the cholera pathogen Vibrio cholerae A;Reference number: A82035; MUID:20406833; PMID:10952301
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A;Experimental source: strain 16M
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Pred. No. 1.3e+02;
3; Mismatches 14
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Pred. No. 17;
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H.; Dragoi, 1
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R;Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, L.; Burgett, S.; DeHoff, B. e. R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren, Y. P.; Sun, P.M., Winkler, M.B.
J. Bacteriol. 183, 5709-5717, 2001
A;Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas, A;Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A;Reference number: A97872; MUID:21429245; PMID:11544234
A;Residues: 1-317 <KUR>
A;Residues: 1-317 <KUR>
A;Cross-references: Tritory
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R;Tettelln, H.; Nelson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heicon, J.D.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapple, on, J.D.; Hickey, E.K.; Holt, I.E.
Science 293, 498-506, 2001
A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, B.A.; Morrison, A;Title: Complete Genome Sequence of a virulent isolate of Streptococcus pneumoniae.
A;Reference number: A95000; MUID:21357209; PMID:11463916
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F95015
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residuse: 1-180 -GRA>
A;Cross-references: UNIPROT:O41141; UNIPARC:UPIO0000F287D; EMBL:U42580; NID:g4028896;
A;Experimental source: specific host Chlorella strain NC64A
C;Genetics:
C;Genetics:
A;Note: A659L
                                                                                                                                                                                                                                                                                                                           glycosyl transferase, family 2 [imported] - Streptococcus pneumoniae (strain C;Species: Streptococcus pneumoniae C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 09-Jul-2004 C;Accession: H97888 C;Accession: H97888 J.A.; Alborn Jr., W.; Arnold, J.; Blaszczak, L.; Burgett, S.; DeHe
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H97888
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A;Molecule type: DNA
A;Residues: 1-291 <KUR>
A;Experimental source: strain TIGR4
A;Experimental source: strain TIGR4
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Query Match
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Best Local :
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Pred. No. 29;
Score 47,
Pred. No.
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  DB 2;
32;
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  RESULT 37
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A; Map position: ci:
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A;Accessious Analy A;Status; preliminary A;Status; preliminary A;Molecule type: DNA A;Molecule type: DNA A;Residues: 1-489 «KUR» A;Residues: 1-489 «KUR» A;Residues: 10-489 «KUR» A;Residues: 10-489
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AD2834
C;Species: Agrobacterium tumefaciens
C;Species: Agrobacterium tumefaciens
C;Species: Agrobacterium tumefaciens
C;Species: Agrobacterium tumefaciens
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 05-Oct-2004
C;Accession: AD2834
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, Y.; Woo, lerage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, M.; McClel erage, G.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Kamm,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrol A;Reference number: A97359; MUID:21608551; PMID:11743194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein AGR_C_3809 [imported] - Agrobacterium tumefaciens (strain constant) for the following forms of the following forms o
                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Map positIon: circular chromosome C;Superfamily: UDP-N-acetylmuramate-alanine ligase
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A;Status: preliminar
A;Molecule type: DNA
A;Residues: 1-508 <K
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A;Title: The Genome of the Natural Genetic A;Title: The Genome of the Natural Genetic A;Reference number: AB2577; MUID:21608550; A;Accession: AD2834
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8; Conserv
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FRHKQMIEVHHDGVIF 308
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larity 50.0%;
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Markelz, B.
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mitochondrial nicotinamide nucleotide transhydrogenase-related NyAlternate names: protein 13E11.40 C;Species: Neurospora crassa C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change C;Accession: T48756 R;Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Fartmann, B. submitted to the Protein Sequence Database, April 2000 A;Reference number: Z24541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Map
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A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, ker, M.; Mu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome I of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: B86448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA A; Residues: 1-539 < OLI>
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A; Status: preliminary; translated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               probable heat shock transcription factor - fission yeast (Schizosaccharomyces C;Species: Schizosaccharomyces pombe C;Date: 03-Dec1999 #sequence_revision 03-Dec-1999 #text_change 31-Dec-2004 C;Accession: T39150
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R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, CChin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.;
                                                                                                                                                                                                      RESULT 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Oliver, K.; Harris, D.; Barrell, B.G.; Rajandream, submitted to the EMBL Data Library, September 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: UNIPROT:Q9LQM5; UNIPARC:UPI00000ABF54; GB:AE005172; NID:g8920608; PI
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-688 <S'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ansen, N.F.; Hughes, B.; Huizar, L. Nature 408, 816-820, 2000
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50.0%; Pred. No. 69
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Pred. No.
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                                                                                              #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                  Length 539;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL: Z99168; PIDN: CAB16301.1
                                                           В.,
                                                                                                                                                                                                                                                                                                                                                                                                                             domain
                                                                                                                                                           protein
                                                           Holland, R.; Nyakatura
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Maiti, R.; Marzial
                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                         [imported]
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war, K.;
                                                  A; Map position:
C; Superfamily:
                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-219 < BUS>
                                                                                                                                                                                                                  R;Bussey, H.
submitted to the EMBL Data
A;Reference number: S70311
A;Accession: S70311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                           A;Cross-references: SGD:S0002129
A;Map position: 1R
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                                                                                                                   A;Gene: SGD:ERP1; MIPS:YAR002c-a
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Experimental source:
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A; Residues: 1-77 < KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C; Keywords: mitochondrion F; 56-353/Domain: alanine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary
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C;Superfamily: NAD(P)+ transhy
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A; Introns: 37/1;
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Matches
                  Query Match
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hypothetical protein YAR002c-a -
C;Specias: Saccharomyces cerevisi
C;Date: 27-Apr-1996 #sequence_rev
C;Accession: S70311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, F.; Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R. J. Bacteriol. 183, 4823-4838, 2001
A;Title: Genome Sequence and Comparative Analysis of the A;Reference number: A96900; MUID:21359325; PMID:21359325, A;Accession: C97027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: DNA
A;Residues: 1-1068 <SCH>
A;Cross-references: UNIPROT:Q9P712; UNIPARC:UPI0000175045; EMBL:AL353820; GSPDB:GN00112
A;Experimental source: cosmid contig 13E11; strain 74
                                                                                                                                         A; Cross-references: UNIPARC: UPI0000052F10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cross-references: UNIPROT:Q97K89; UNIPARC:UPI00000CA073; Experimental source: Clostridium acetobutylicum ATCC824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein, involved in iron transport CAC1030 [imported] Clostridium acetobutylicum
                                                                                                                                                                                                                                                                                                                                                                                                                   16 DAEVRDITGTEVMCKKLM----EMGFNNGA
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                                                                                                                                                                                                                                                                               #sequence_revision
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28.4%;
                                                  hypothetical protein YHR110w
                                                                                                                                                                                                                                                                                                          cerevisiae
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28.4%;
                                                                                                                                                                                                                                Library,
                                                                                                                                                                                                                                                                                                                         yeast (Saccharomyces cerevisiae)
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Score
Pred.
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Pred. No. 1.5e
2; Mismatches
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Pred. No. 9.
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No.
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 30;
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                DВ
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               Length
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                                                                                                                                         NID:g1339990; PIDN:AAC04958.
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                  219;
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R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.;
; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; F.
D.; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.;
A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Accession: AF1266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 43
AH1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                   G;Species: Listeria innocua
G;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004
G;Accession: AHIG28
R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche,
; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-311 -GLA>
A;Cross-references: UNIPROT:Q8Y6Z6; UNIPARC:UPI00000551D9; GB:NC_003210; PIDN:CAC99612.
A;Experimental source: strain EGD-e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L-lactate dehydrogenase homolog lmo1534 [imported] - Listeria monocytogenes C;Species: Listeria monocytogenes C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004 C;Accession: AF1266 R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche,
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Matches 7
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Matches 7
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A.; Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, K. C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J., Title: Comparative genomics of Listeria species. Reference number: AB1077; MUID:21537279; PMID:11679669; Accession: AH1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Superfamily: L-lactate dehydrogenase;
                                                                                                                                                                                Superfamily: L-lactate dehydrogenase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 actate dehydrogenase homolog lin1569 [imported] - Listeria innocua (strain Clip11262).
                                  214
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                                                                                                         Similarity 7; Conserv
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Similarity 50.0%;
7; Conservative
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                                                                    EFRHDSGYEVHHQK 16
                                                                                                         28.4%;
larity 50.0%;
Conservative
                                                                                                         Score 46; DB
Pred. No. 44;
4; Mismatches
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Pred. No. 44;
4; Mismatches
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                                                                                                                                              Length 311;
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:ian, K.D.;
                                                                                                             Gaps
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Voss, H.; Wehland,
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Fsihi, H.
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Fsihi, H.
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hypothetical protein T09A5.12 - Caenorhab C; Species: Caenorhabditis elegans C; Date: 15-Oct-1999 #sequence_revision 15 C; Accession: T24727 R; Lightning, J submitted to the EMBL Data Library, Augus A; Accession: T24727 A; Status: preliminary; translated from GB A; Molecule type: DNA A; Molecule type: DNA A; Residues: 1-708 <WIL>
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C; Superfamily:
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A;Molecule type: DNA
A;Residues: 1-372 <STO>
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9; Conservative
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                                                                                                                                                                                  Caenorhabditis elegans
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A,Status: prelimary
A,Molecule type: DNA
A,Residues: 1-372 <HAY>
A,Cross-references: UNIPROT:085339, UNIPARC:UPI0000D5DBD; GB:BA000007; PIDN:BAB36262.1
A,Experimental source: strain O157:H7, substrain RIMD 0509952
C;Genetics:
                                                                                                                                                                                                                                                                           RESULT 45
B85829
GDP-mannose dehydratase [imported] - Escherichia coli (strain O157:H7, substrain G159ecies: Escherichia coli
C;Species: Escherichia coli
C;Species: B85829
G;Accession: B85829
G;Accession: B85829
E;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.;
E;Perna, N.T.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; A
Nature 409, 529-533, 2001
A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A;Reference number: A85480; MUID:21074935; PMID:11206551
A;Accession: B85829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori, M.; Shinagawa, H. DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 A;Reference number: A99629; MUID:21156231; PMID:11258796
A;Accession: G90983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GDP-D-mannose dehydratase [imported] - Escherichia coli (strain 0157:H7, substrain RIMD C;Species: Escherichia coli (c;Species: Escherichia coli (c;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 12-Jul-2004 C;Accession: G90983 R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Gene: ECs2839
C;Superfamily: GDP-D-mannose 4,6
                                                                                                                                       A;Cross-references: UNIPROT:O85339; UNIPARC:UPI00000D5DBD;
A;Experimental source: strain O157:H7, substrain EDL933
C;Genetics:
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Kasunaga, T.; Kuhara, S.;
                                                                                       GDP-D-mannose 4,6 dehydratase
                28.4%;
75.0%;
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              Score 46; DB
Pred. No. 54;
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Pred. No. 54;
Mismatches
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Indels
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August

15-Oct-1999

#text_change

09-Jul-2004

GB/EMBL/DDBJ

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C;Accession: S59041
R;Pauley, A.
Rubmitted to the EMBL Data Library, April 1995
submitted to the sequence of S. cerevisiae C
                                                                                                                                                                                                                                                               C;Species: Clostridium novyi
A;Variety: ATCC 19402
C;Date: 28-Oct-1996 #sequence_revision 08-Nov-1996 #text_change 09-Jul-2004
C;Accession: S55805; S71294; S71158; S44273; I40834; S44272
R;Hofmann, F.; Herrmann, A.; Habermann, E.; von Eichel-Streiber, C.
Mol. Genet. 247, 670-679, 1995
Mol. Gen. Genet. 247, 670-679, 1995
A;Title: Sequencing and analysis of the gene encoding the alpha-toxin of Cl.
A;Reference number: I40834; MUID:95342160; PMID:7616958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:P45972; UNIPARC:UPI000013BBE3; EMBL:Z36753; A;Experimental source: clone T09A5 C;Genetics:
A;Genetics:
A;Gene: CESP:T09A5.12
A;Map position: 2
A;Introns: 22/3; 49/3; 100/3; 130/2; 167/2; 269/2; 318/3; 461/3; 487/1; C;Superfamily: Caenorhabditis elegans hypothetical protein T09A5.12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Keywords: transmembrane ניטיכייי predicted <TWM>
F;1005-1021/Domain: transmembrane #status predicted <TWM>
                     submitted to the EMBL Data Library, March 1995
A;Reference number: S71158
                                                                                A;Molecule type: protein
A;Residues: 1-15 <HOW>
A;Cross-references: UNIPARC:UPI000017CA47
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C;Superfamily: 4-alpha-glucanotransferase /
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A; Residues: 1-1536 < PAU>
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                                                                                                                                                                                     A; Molecule type: DNA
A; Residues: 1-2178 < HOF>
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N,Alternate names: hypothetical protein P9705.2
                                                                                                                                                                                                                              A;Status: nucleic
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;Date: 13-Jan-1996 #sequence_revis
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Best Local
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Best Local (
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1; Mismatc
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Pred. No. 1.1e+02;
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polyprotein - potato virus N;Contains: coat protein C;Species: potato virus Y,
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                                                                JT0960
                                                                                  RESULT 50
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Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; Nature 390, 364-370, 1997
A;Authors: Utterback, T.; Cotton, M.D.; Spriggs, T.; Artiach, P.; Smith, H.O.; Woese, C.R.; Venter, J.C.
A;Title: The complete genome sequence of the hyperthermophilic, su A;Accession: G69525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       formylmethanofuran-tetrahydromethanopterin N-formyltransferase (EC 2.3.1.101) ftr-2 N;Alternate names: formylmethanofuran:tetrahydromethanopterin formyltransferase (ftr C;Species: Archaeoglobus fulgidus C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004 C;Accession: G69525; A48369 R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.B.; Ketchum, K.A.; Do R;Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.G.; Gill, S.; Kirkness, Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L. Nelson, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L.
                                                                                                                                                                                                                                             A;Molecule type: protein
A;Residues: 1-31,33,'I',35-42,'T',44-49 <SCH>
A;Residues: 1-31,33,'I',35-42,'T',44-49 <SCH>
A;Cross-references: UNIPARC:UPI0000178E9D
A;Note: sequence extracted from NCBI backbone (NCBID:130602)
C;Superfamily: formylmethanofuran:tetrahydromethanopterin fo
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C;Keywords: virulence factor
F;1880-1899/Domain: cpl repeat homology
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A;Description: Sequence analysis of Clostridium novyi alpha-toxin: a
                                                                                                                                                                                                                     C; Superfamily: formylmethanc
C; Keywords: acyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e enzymes from methanogenic Archaea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references: UNIPROT:028076; UNIPARC:UPI0000056A22; GB:AE000953; R;Schworer, B.; Breitung, J.; Klein, A.R.; Stetter, K.O.; Thauer, R.K. Arch. Microbiol. 159, 225-232, 1993
A;Title: Formylmethanofuran: tetrahydromethanopterin formyltransferase a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: DNA
A;Residues: 1-297 <KLE>
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A; Residues: 1-243; 1204-2178 < HOA>
                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                              A;Accession: A48369
                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Reference number: A48369; MUID: 93243884; PMID: 8481089
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                                                                                                                                                            Query Match
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DAEEKFDTGF----KLKFFADGYEKEVEVGGRK 138
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Pred. No. 50;
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Pred. No. 3.8e+02;
                                                                                                            Mismatches
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                                                                                                            Gaps
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genome polyprotein - potato virus Y (strain N) (fragment)
Gr.Species: potato virus Y, PVY
A;Note: host Nicotiana benthamiana
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 31-Dec-200
C;Accession: JA0073; PS0281
R; van der Vlud; R:, Allefs, S:, de Haan, P.; Goldbach, R.
R; Van der Vlud; R:, Allefs S:, de Haan, P.; Goldbach, R.
J. Gen. Virol. 70, 229-233, 1989
A;Title: Nucleotide sequence of the 3'-terminal region of potato virus YN A;Reference number: JA0073; MUID:89279196; PMID:2732687
A;Accession: JA0073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Reference number: JT0959
A;Accession: JT0960
A;Molecule type: genomic RNA
A;Residues: 1-313 <AIID>
A;Cross-references: UNIPROT:Q85259; UNIPARC:UPI000017871B
A;Experimental source: necrotic strain T
C;Superfamily: tobacco etch virus genome polyprotein
C;Keywords: polyprotein
C;Keywords: polyprotein #status predicted <COA>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Map position: II
C;Superfamily: pyruvate dehydrogenase,
C:Keywords: oxidoreductase
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A;Title: The genome sequence of the facultative intracellular pathogen Brucella meliten: A;Reference number: AD3252; PMID:11756688
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;Molecule type: genomic RNA;Residues: 1-427 <VAN>;Coss-references: UNIPROT:Q85265; UNIPROT:Q85104;;Accession: PSO281;Molecule type: protein;Residues: 161-182 <VA2>
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species: Brucella melitensis
spate: 01-Feb-2002 #sequence_revision 01-Feb-2002 #text_change 12-Jul-2004
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11; Conserv
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ilarity 55.0%;
Conservative
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Pred. No. 58;
1; Mismatches
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Pred. No. 5
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                                                                   UNIPARC: UPI0000178719
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RESULT 53
A36793
A)
RESULT 53
A)
ROTE: hypothetical protein 64 - ictalurid herpesvirus 1 (strain auburn c);Species: ictalurid herpesvirus 1
C);Species: ictalurus punctatus (channel catfish)
A);Note: host Ictalurus punctatus (channel catfish)
C);Date: 17-Aug-1992 #sequence_revision 17-Aug-1992 #text_change C);Accession: A36793
                                                                                                                                                                                                                                                                                 C;Accession: G71526
R;Stephens, R.S.; Kalman, S.
Science 282, 754-759, 1998
A;Title: Genome sequence of
A;Reference number: A71570;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Davison, A.J.

Virology 186, 9-14, 1992

A;Title: Channel catfish virus: a new type of herpesvirus.

A;Reference number: A39447; MUID:92087490; PMID:1727613

A;Contents: annotation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R; Davison, A.J.
submitted to GenBank, January 1992
A; Description: Channel catfish virus:
A; Reference number: A36804
A; Accession: A36793
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C;Keywords: polyprotein
F;161-427/Product: coat protein #status e
                                                                                                                                                A;Accession: G71526
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-678 <ARN>
A;Residues: 1-678 <ARN>
A;Experimental source: serotype D, strain UW-3/Cx
A;Experimental source: serotype D, strain UW-3/Cx
                                                                                                                                                                                                                                                                                                                                                                                          3-methyl-2-oxobutanoate dehydrogenase (lipoamide) (EC 1.2.4.4) alpha/beta El chain N;Alternate names: oxoisovalerate dehydrogenase C;Species: Chlamydia trachomatis C;Species: Chlamydia trachomatis C;Species: 13-Sep-1998 #sequence_revision 13-Sep-1998 #text_change 09-Jul-2004
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C;Superfamily: ictalurid herpesvirus 1 hypothetical protein
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A;Residues: 1-514 <DAV-
A;Cross-references: UNIPROT:Q00156; UNIPARC:UPI00001385E9;
Query Match
Best Local S
Matches 11
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Best Local Similarity 66.7%; Pred. No. 75;
Matches 10; Conservative 1; Mismatches
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Best Local S
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                                                                                      oxidoreductase
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                          Similarity
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  Conservative
                  28.1%;
                                                                                                                                                                                                                                                                                                                                                     S.; Lammel, C.J.; Fan, J.; Marathe, R.; Aravind, L.; Mitchell,
                                                                                                                                                                                                                                                                                      an obligate intracellular pathogen of humans: Chlamydia trawmUID:99000809; PMID:9784136
2;
                     Score 45.5;
Pred. No. 1
     Mismatches
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R;Lin,
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Nature 409, 1077-1011, 2001
A;Authors: Rutter, S.; Seeger, K.; Simon, S.
A;Title: Massive gene decay in the leprosy
A;Title: Massive gene decay MUID:21128732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_rev:
C;Accession: T23255
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G87000
           R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter
                                                           phosphoprotein phosphatase (BC 3.1.3.16) At2g42810 [similarity] - Arabidopsis C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 28-Apr-2003
C;Accession: E84858
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A; Residues: 1-530 <WIL>
A; Cross-references: UNIFROT: 021167;
A; Experimental source: clone K03A11
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A;Accession: G87000
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                                                                                                                                                                                                                             AEFRHDSGYEVHHOKLVF-FAEDVGSN 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UNIPROT: Q49673; UNIPARC: UPI00000D4398; GB: AL450380; NID: g13092860;
                                                                                                                                                                                                                                                                                                                             233/2; 271/1; 319/1; 356/3; 374/3; 443/3;
                                                                                                                                                                                                                                                                             27.8%;
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                                                                                                                                                                                                                                                                             Score 45;
Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                           UNIPARC: UPI000007F7E0; EMBL: Z77133; PIDN: CAB00864.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S.; Simmonds, M.;
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PMID:11234002
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Holroyd,
                              C.Y.;
lon, L.
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BHTLE
                                                                                               F;151-374/Domain: 2 <DO2>
F;375-624/Domain: 3 <DO3>
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C;Superfamily: protein
C;Keywords: phosphoric
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A; Residues: 1-624 < VOI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-533 <STO>
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Query Match
Best Local S
Matches 8
                                                             ;169,173,200/Binding site:
;320,324,360/Binding site:
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Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                              Superfamily:
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                                                                                                                              2-150/Domain: 1 <DO1>
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8; Conser
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ilarity 66.7%;
Conservative
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A;Cross-references: UNIPARC:UPI000016BE9F; EMBL:X16894; NID:g9268; PIR;Schneider, H.J.; Drexel, R.; Feldmaier, G.; Linzen, B.; Lottspeich, Hoppe-Seyler's Z. Physiol. Chem. 364, 1357-1391, 1983
A;Title: Hemocyanins in spiders, XVIII[1]. Complete amino-acid sequen. A;Reference number: A02566; MUID:84059633; PMID:6357986
A;Accession: A02566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R;Voll, W.; Volt, R.
Proc. Natl. Acad. Sci. U.S.A. 87, 5312-5316, 1990
A;Title: Characterization of the gene encoding the hemocyanin subunit A;Reference number: A35772; MUID:90319102; PMID:2371273
A;Accession: A35772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A;Reference number: A84420; MUID:20083487; PMID:10617197
A;Accession: E84858
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                           A;Molecule type: protein
A;Residues: 2-29,'K',31-46,'D',48-79,'K',81-90,'H',92-110,112-159,'K',161-216,'H',218-2
A;Cross-references: UNIPARC:UPI0000173921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Biol. Chem. 265, 19447-19452, 1990
A;Title: Arthropod hemocyanins. Molecular cloning and sequencing A;Reference number: A37975; MUID:91060544; PMID:2246235
A;Accession: S13441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hemocyanin chain e - American tarantula (Eurypelma californica)
C;Species: Eurypelma californica
C;Date: 15-Nov-1984 #sequence revision 31-Mar-1992 #text change 09-Jul-2004
C;Accession: S06701; A35772; S13441; A02566; A24179; B37975; S08107
                                                                                                                                                                                                                                                                                      A; Introns: 65/1; 137/3; 206/2; 338/3; 381/3;
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A; Residues: 1-64;604-624 < VOL2>
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A;Reference number: S06701
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                                                                                                                                                                                                             ;Keywords: copper; hemolymph; oxygen carrier;2-624/Product: hemocyanin chain e #status experimental <MAT>
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Score 45; DB
Pred. No. 1.3e
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                      DB 1;
1.3e+02
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predicted
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RESULT 61
AB1847
serine/threonine kinase with two-component sensor domain all0323 [imported] -
C;Species: Nostoc sp. PCC 7120
C;Species: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC 712
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
C;Accession: AB1847
C;
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A;Accession: A60999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Pathway: glycogen/starch degradation c;Superfamily: pullulanase type debranching enzyme C;Keywords: glycosidase, hydrolase, polysaccharide F;1-32/Domain: signal sequence #status predicted <
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A;Residues: 1-702 <WIL>
A;Cross-references: UNIPROT:P14296; UNIPARC:UPI00001260D5; GB:M28396; EMBL:J05092; NID.
C;Superfamily: arylphorin
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A; Residues: 1-1104 <KIM>
A; Residues: 1-1104 <KIM>
A; Cross-references: UNIPROT: Q06812; UNIPARC: UPI00000BCA94; GB: X55799; NID: g296762;
C; Function:
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R;Kimura, T.; Horikoshi, K.
FEMS Microbiol. Lett. 71, 35-42,
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Best Local S
Matches 7
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larity 36.8%;
Conservative
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of an alpha-amylase
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Pred. No. 2.5e+02;
5; Mismatches 7;
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Pred. No. 1.50
7; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1104;
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M.; Tabata,
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                                                                                                                                                                                                                                                        D.; Jones, L.M.; Karst, U. Science 294, 849-852, 2001
Science 294, 849-852, 2001
A;Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, A;Authors: Kreft, J.; Kuhn, M.; Tierrez, A.; Vazquez-Boland, J. ok, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J. ok, C.; Schlueter, Genomics of Listeria species.
A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Reference number: AB1077; MUID:21537279; PMID:11679669
A;Reference number: AB1077; MUID:21537279; PMID:11679669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probable phosphoprotein phosphatase homolog lin1935 [imported] - Listeria innocua C;Species: Listeria innocua C;Species: Listeria innocua C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-2004 C;Accession: ABI674 C;Accession: ABI674 R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bl.; Doninguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi D.; Joninguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi D.; Joninguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi D.; Joninguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi D.; Joninguez-Bernal, G.; Duchaud, B.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi D.; Joninguez-Bernal, G.; Duchaud, B.; Durand, E.; Durand, E.; Duchaud, B.; Duchaud, B.; Durand, E.; Duchaud, B.; Durand, E.; Duchaud, B.; Duchaud,
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C; Superfamily:
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Best Local S
Matches 12
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A;Title: Complete Genomic Sequence of the Filamentous Nitro
A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AB1847
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1808 <KUR>
A;Cross-references: UNIFROT;Q8YZY1; UNIFARC:UPI00000CDCE8;
A;Experimental source: strain PCC 7120
C;Genetics:
                           11 EVHHQKLVFFAEDVG 25
                                                               h 27.8%;
Similarity 53.3%;
B; Conservative
                                                                                                                                                                                                                                                                                 Sequence of the Filamentous Nitrogen-fixing 7; MUID:21595285; PMID:11759840
92
                                                                     Score 45; DB
Pred. No. 4.4
2; Mismatches
                                                               DB 2;
4.4e+02;
5;
                                                                                                     Length 1808
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                                                                     Gaps
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                                                                                                                                                                                               PIDN:BAB72281
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probable phosphoprotein phosphatase homolog lmol821 [imported] - Listeria C;Species: Listeria monocytogenes C;Date: 27-Nov-2001 #sequence_revision 27-Nov-2001 #text_change 09-Jul-200 C;Accession: AE1302 #sequence_revision 27-Nov-2001 #text_change 09-Jul-200 C;Accession: AE1302 | L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche R;Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche ; Dominguez-Berral, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K D; Jones, L.M.; Karst, U. Science 294, 49-852, 2001 | Nones, L.M.; Karst, U. Science 294, 49-852, 2001 | Nones, K. St.; Varapkat, G.; Madueno, E.; Mait ok, C.; Schluecer, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss A; Title: Comparative genomics of Listeria species.
A;Title: Comparative genomics of Listeria species.
A;Reference number: AB1077; MUID:21537279; PMID:11679669 A;Recession: AB1302
A;Genetics: Trois Collaboration of the college of Conservative hypothetical protein yloO; conserved hypothetical 27.5%; ----QKLVFFAEDVGSNK 28 5 Score 44.5; Pred. No. 59; UNIPARC: UPI0000054E18; GB:NC_003210; Mismatches DB 2; Length Indels 252; F.; Berche, P.; Entian, K.D.; 09-Jul-2004 Listeria monocytogenes Maitournam, A.; M Voss, H.; Wehland PIDN:CAC99899 protein ; Bloecke Fsihi, H ጟ

42

A .

Maitournam, A.; M Voss, H.; Wehland

; Bloecke Fsihi, H

(stra

A;Status: preliminary
A;Molecule type: DNA
A;Molecule type: DNA
A;Rosidues: 1-252 <GLA>
A;Cross-references: UNIPROT:Q92A17; UNIPARC:UPI00000CC6B5; GB:AL592022; PIDN:CAC97165.1
A;Experimental source: strain Clip11262

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C;Genetics:
A;Gene: lin1935
C;Superfamily:
RESULT
A69662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nypothetical protein F19B15.100 - Arabidopsis thaliana C,Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_C;Accession: T08962
                                                                                                                                                                                                                      A; Gene: CESP: C40H5.4
A; Map position: Y
                                                                                                                                                                                                                                                                                                                                                          submitted to the EMBL Data Library, A;Reference number: Z19189
A;Accession: T19869
                                                                                                                                                                                                                                                                                                                                                                                                                                               hypothetical protein C40H5.4 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #t
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A;Cross-references: UNIPROT:Q9SZD7; UNIPARC:UPI000009C8EB;
A;Experimental source: cultivar Columbia; BAC clone F19B15
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A; Residues: 1-392 <WIL>
                                                                                                                                                                                                                                                                                                                                                                                                                 R;White,
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                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Gene: ATSP:F19B15.100
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Best Local S
Matches 11
                                                                                                                                                                                           ;Map position: X
;Introns: 35/1; 54/2; 117/1; 167/1; 207/2; 282/1; 323/3
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                66
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12; Conserv
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                                                                                                   DAEFRHDSGYEVHHQKLVFFAEDVGSN 27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27.5%;
ilarity 30.0%;
Conservative
                                                                                                                                     Conservative
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                                                                                                                                                  27.5%; Score 44.5; 33.3%; Pred. No. 96;
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 Mismatches

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Pred. No. 59;
5; Mismatches
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Pred. No. 76;
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                                                                                                                                     Mismatches
                                                                  -VGNN 344
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                                                                                                                                  9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5;
                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                  1;
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RESULT
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C;Accession: A69662

C;Accession: A69662

R;Kunst, F: Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berti, C.; Bron, S.; Brouvillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; C. A.; Brrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E. Rature 390, 249-256, 1997

A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galliech, J.; Harwood, C.R.; Henaut, A.; Hilbert, H.; Holsappel, S.; Hosono, S.; Hullo, M. Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinoi. A; Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Mauer, Y., W.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetell Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlo, A; Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Ser akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchiyama, V.; Winters, P.; Wipat, A.; Yamamocto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida, A; Authors: Yoshikawa, H.F.; Zumstein, B.; Yoshikawa, H.; Danchin, A. A; Ser A; Accession: A69662

A; Accession: A69662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Bevan, M.; Bancroft, I.; Bent, E.; Love, K.; Goodman, H.; Dean, C.; Bergkamp, R.; P.; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, N.; avanagh, T.; Hempel, S.; Kotter, P.; Entian, K.D.; Rieger, M.; Schaeffer, M.; Funk, Nature 391, 485-488, 1998
A;Authors: Mueller-Auer, S.; Silvey, M.; James, R.; Montfort, A.; Pons, A.; Puigdome erhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechman, S.; erhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechman, S.;
片
                                                                                                                                                                                                                                                                                                                                                                                                                           A;Title: Analysis of 1.9 Mb of contiguous sequence from chromosome 4 of Arabidopsis A;Reference number: A71400; MUID:98121113; PMID:9461215 A;Accession: F71420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UDP-N-acetylglucosamine 1-carboxyvinyltransferase murA -
C;Species: Bacillus subtilis
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_
C;Accession: A69662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse-ear cress)
A;Variety: columbia
C;Date: 03-Aug-1998 #sequence_revision 03-Aug-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
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C;Superfamily:
                                                                                                                                                                                                                                            A; Map position: 4COP9-4G3845
                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-559 <BEV>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C.; Chalwatzis, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Accession: F71420
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A;Experimental source: strain 168
                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:023409; UNIPARC:UPI00000A75E8; GB:Z97339;
                                                                                                                                                                                                                                                                                                                                                                                                 A; Status: preliminary; nucleic acid sequence not shown; translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Experimental source:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Residues: 1-436 <KUN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Status: preliminary; nucleic acid sequence not shown; translation
                                                                                                                       Matches
                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                         Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               67
222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10;
                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
AQFRLADPGYEDYHRKFV
                                                       AEFR-HDSGYEVHHQKLV 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ELKHLDRGYVDFHQKLAALGADI 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EFRH-DSGYEVHHQKLVFFAEDV 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UDP-N-acetylglucosamine 1-carboxyvinyltransferase
                                                                                                              27.5%;
nilarity 55.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #sequence_revision 05-Dec-1997 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27.5%;
239
                                                                                                                    ω
••
                                                                                                                    Score 44.5; D
Pred. No. 1.4e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 44.5;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5; DB 2;
1.1e+02;
                                                                                                                                                     .4e+02;
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                                                                                                                                                                                  2
                                                                                                                                                                           Length
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                                                                                                                       Indels
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                                                                                                                    1;
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                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                          NID:g2244901; PII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A.; Puigdomene
                                                                                                                    1;
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B. Gi

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NID

83

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RESULT 70

A55734

sodium channel, voltage-gated, beta-1 chain precursor - human

C;Species: Homo sapiens (man)

C;Species: Homo sapiens (man)

C;Date: 18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change 09-Jul-2004

C;Accession: A55734; A53408; I54354

R;Makita, N.; Sloan-Brown, K.; Weghuis, D.O.; Ropers, H.H.; George Jr., A.L.

Genomics 23, 628-634, 1994

A;Title: Genomic organization and chromosomal assignment of the human voltag

A;Reference number: A55734; MUID:95154833; PMID:7851891

A;Accession: A55734

A;Molecule type: DNA

A;Residues: 1-218 <MAKI>
A;Cross-references: UNIPROT:Q07699; UNIPARC:UPI00000532B2; GB:U12189

P.Makita, N.; Bennett Jr., P.B.; George Jr., A.L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C81683
J-methyl-2-oxobutanoate dehydrogenase (lipoamide) (EC 1.2.4.4) alpha/beta El chain TC0.
N;Alternate names: oxoisovalerate dehydrogenase
C;Species: Chlamydia muridarum, Chlamydia trachomatis MoPn
C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_Change 09-Jul-2004
C;Accession: C81683
R;Read, T.D.; Brunham, R.C.; Shen, C.; Gill, S.R.; Heidelberg, J.F.; White, O.; Hickey, C.; Dodson, R.; Gwinn, M.; Nelson, W.; DeBoy, R.; Kolonay, J.; McClarty, G.; Salzber, Nucleic Acids Res. 28, 1397-1406, 2000
A;Title: Genome sequences of Chlamydia trachomatis MoPn and Chlamydia pneumoniae AR39.
A;Accession: C81683
N;Accession: C81683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probable secreted proteinase - Streptomyces coelicolor C;Species: Streptomyces coelicolor C;Species: Streptomyces coelicolor C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_chans C;Accession: T36143
R;Seeger, K.; Harris, D.; James, K.D.; Parkhill, J.; Barrell, submitted to the EMBL Data Library, July 1999
A;Reference number: Z21598
A;Accession: T36143
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Gene: SCOEDB
C; Superfamily:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-781 <SEE>
A;Cross-references: UNIPARC:UPI0000DB27A; EMBL:AL096852;
A;Experimental source: strain A3(2)
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C;Keywords: oxidoreductase
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-678 <TET>
A;Cross-references: UNIPROT:Q9PK54; UNIPARC:UPI00000579C3; GB:AE002330; GB:AE002160;
A;Experimental source: strain Nigg (MoPn)
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Best Local S
Matches 10
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Best Local S
Matches 10
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family: secreted virulence protease, InhA type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                              DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMHRDPGVVVFGEDVAGNKG 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EVHHOK-LVFFAEDVGSNKG 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27.5%; Score 44.5; DB 2; ilarity 33.3%; Pred. No. 2.1e+02; Conservative 5; Mismatches 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27.5%;
larity 50.0%;
Conservative
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Pred. No. 1.8
2; Mismatches
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.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 781;
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                                                                                                                                                                                          human voltage-gated
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Salzberg,
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                                                                           A,Fittle: The complete genome geguence of Escherichia coli (Strain K-12) A,Fittle: The complete genome sequence of Escherichia coli (A,Fittle: 12-Sep-1997 #sequence_revision 17-Sep-1997 #text_ch C,Patcession: A64978  
R,Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.A.; Rose, D.J.; Mau, B.; Shao, Y.
Science 277, 1453-1462, 1997  
A,Title: The complete genome sequence of Escherichia coli K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Note: sequence extracted from N C;Keywords: transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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A;Gene: GDB:SCN1B
                                                                                                                                                                                                                                                                                         RESULT 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Experimental source: brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                             113
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                                                                                                                                                                                                                                                                                                                                                                                                      4
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                                                           number:
                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 41.: 7; Conservative
                                                                                                                                                                                                                                                                                                                                                             YNHSGDYECHVYRLLFF 129
                                                                                                                                                                                                                                                                                                                                                                                                      FRHDSGYEVHHQKLVFF 20
                                                                                                                                                                                                                                                                                                                                                                                                                                              27.2%;
llarity 41.2%;
Conservative
                                                           te genome sequence of Escherichia coli K-12
A64720; MUID:97426617; PMID:9278503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27.2%;
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R/ISOM, L.L., De Jongh, K.S.; Patton, D.E.; Reber, B.F.; Offord, J.; Charbonneau, Science 256, 839-842, 1992

A;Title: Primary structure and functional expression of the beta 1 subunit of the A;Reference number: A42737; MUID:92271207; PMID:1375395

A;Recession: A42737, muid:92271207; PMID:1375395

A;Accession: A42737; not compared with conceptual translation

A;Status: preliminary; not compared with conceptual translation

A;Molecule type: nucleic acid; protein

A;Residues: 1-218 c/ISO'

A;Residues: 1-218 c/ISO'

A;Residues: 1-218 c/ISO'

A;Residues: 1-218 c/ISO'

A;Residues: 1-218 c/ISO'
                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 71

A4273T

A4273T

Sodium channel beta 1 subunit - rat

C;Species: Rattus norvegicus (Norway rat)

C;Species: Rattus norvegicus (Norway rat)

C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004

C;Accession: A42737

C;Accession: A42737
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A;Map position: 19413.1-19413.1
C;Keywords: glycoprotein; miscle; transmembrane protein P;1-19/Domain: signal sequence #status predicted <STMo-F;161-182/Domain: transmembrane #status predicted <TMMo-F;93;110,114,135/Binding site: carbohydrate (Asn) (cova-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: mRNA
A;Residues: 1-218 <MAX2>
A;Residues: 1-218 <MAX2>
A;Cross-references: UNIPARC:UPI00000532B2; GB:L16242; NID:g450602;
A;Cross-references: UNIPARC:UPI00000532B2; GB:L16242; NID:g450602;
A;McClatchey, A.I.; Cannon, S.C.; Slaugenhaupt, S.A.; Gusella, J.F.
Hum. Mol. Genet. 2, 745-749, 1993
A;Title: The cloning and expression of a sodium channel beta 1-subu A;Reference number: 154354; MUID:93357746; PMID:8394762
A;Accession: 154354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-218 AERS>
A;Cross-references: UNIPARC:UPI00000532B2; GB:L1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      J. Biol. Chem. 269, 7571-7578, 1994
A;Title: Voltage-gated Na(+) channel beta-1 subunit mRNA expressed
A;Reference number: A53408; MUID:94171787; PMID:8125980
A;Accession: A53408
                                                                                                                                    extracted from NCBI backbone
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                           Score 44; DB
Pred. No. 59;
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Pred. No. 59;
   Mismatches
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                                                      2;
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   7;
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                                                      Length 218;
   Indels
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#text_change 09-Jul-2004

N.T.;

Burland,

Riley,

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R;Gerton, G.L.; Hoff, H.B.; Baba, T. submitted to the EMBL Data Library, May A;Description: The amino acid sequence c A;Reference number: $29599
A;Accession: $29599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Residues: 1-284 <CRA>
A;Cross-references: UNIPROT:P09383; UNIPARC:UPI000012CB6B; EMBL;X13531; NID:g10181;
R;Craig III, S.P.; McKerrow, J.H.; Newport, G.R.; Wang, C.C.
Nucleic Acids Res. 16, 7087-7101, 1988
A;Title: Analysis of cDNA encoding the hypoxanthine-guanine phosphoribosyltransferas
A;Reference number: S01201; MUID:88303331; PMID:3136439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 73
504278
hypoxanthine phosphoribosyltransferase (EC 2.4.2.8) - fluke (Schistosoma mansoni)
N;Alternate names: hypoxanthine-guanine phosphoribosyltransferase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Accession: A64978
A;Status: preliminary; nucleic acid sequence not shown; translation not A;Molecule type: DNA
A;Residues: 1-274 <BLAT>
A;Cross-references: UNIPROT:P76425; UNIPARC:UPI000003EAD4; GB:AB000299; A;Experimental source: strain K-12, substrain MG1655
                                                                                                                                                                                                                                                                                                                                                                            acrosin (EC 3.4.21.10) precursor - guinea pig (fragment)
C;Species: Cavia porcellus (guinea pig)
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
S29599
                                                                                                                 A;Cross-references: UNIPROT:Q60491; UNIPARC:UPI00000E5C67; EMBL:Z12153; C;Superfamily: acrosin; trypsin homology C;Keywords: glycoprotein; hydrolase; serine proteinase F;41-284/Domain: trypsin homology <TRY>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R;Craig, S.P.; Muralidhar, M.G.; McKerrow, J.H.; Wang, C.C. submitted to the EMBL Data Library, November 1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 16-Aug-2004
C;Accession: S04278; S01201
                                                                                                                                                                                                    A; Molecule type: mRNA
A; Residues: 1-421 < GER>
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A;Residues: 1-231 <CRA2>
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A; Accession: S04278
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Best Local
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                                                                    Query Match
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9; Conserv
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                                             Similarity
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                                                                                                             trypsin
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                                                                                                             homology
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                       Score 44; DB 2;
Pred. No. 1.2e+02
6; Mismatches
                                                                                                               <TRY>
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Pred. No.
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of guinea pig
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R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, R;Theologis, A.; Ecker, J.R.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H. Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H. ansen, N.F.; Hughes, B.; Huizar, L. wature 408, 816-820, 2000

A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, F. Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H. A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.

A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.

A;Reference number: A86141; MUID:21016719; PMID:11130712
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AB2427
PAVBBS
alpha-a protein -
C;Species: barley
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A;Molecule type: DNA
A;Residues: 1-702 <STO>
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A,Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium
A,Reference number: AB1807; MUID:21595285; PMID:11759840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hypothetical protein all4970 [imported] - Nostoc sp. (strain PCC 7120) C;Species: Nostoc sp. PCC 7120 A;Note: Nostoc sp. strain PCC 7120 is a synonym of Anabaena sp. strain PCC A;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004 C;Pacession: AB2427
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                                                                    RESULT 77
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: UNIPROT:Q9FZ73; UNIPARC:UPI00000A95C4; GB:AE005172; NID:g9802751;
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                                                                                                                                                                                                                            Similarity
8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 6; Conser
                                                                                                                                       VFFCENVGNNK
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barley
stripe
                                                                                                                                                                                                                                 Conservative
  stripe
mosaic
                                                                                                                                       : 576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27.2%;
                                                                                                                                                                                                                                                 27.2%;
    mosaic virus
virus, BSMV
                                                                                                                                                                                                                            Score 44; DB
Pred. No. 2.26
2; Mismatches
                                                                                                                                                                                                                            ν,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 44; DB 2;
Pred. No. 2.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28
                                                                                                                                                                                                                                                 DB 2; 1
2.2e+02;
                                                                                                                                                                                                                                                                    Length 702;
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Khaykin, E. Maiti, R.;

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H.; Tallon,

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A; Note: host Hordeum vulgare (barley)
C; Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 09-Jul-2004
C; Accession: JA0109; RN0104
R; Gustaffeon, G.; Armour, S.L.; Gamboa, G.C.; Burgett, S.G.; Shepherd, J.W.
Vicology 170, 370-377, 1989
A; Title: Nuclectide sequence of barley stripe mosaic virus RNA alpha: RNA alpha encodes
A; Reference number: JA0109; MUID:89268457; PMID:2728343
A; Racference number: JA0109
A; Molecule type: genomic RNA
A; Residues: 1-139 <CUS-
A; Rikozlov, Y.V.; Afanasiev, B.N.; Rupasov, V.V.; Golova, Y.B.; Kulaeva, O.I.; Dolja, V.V.
Mol. Biol. (Mosk.) 23, 1080-1090, 1989
A; Title: The complete nuclectide sequence of barley stripe mosaic virus RNA 3 and its va
A; Reference number: PN0102; MUID:90066400; PMID:2586501
A; Racession: PN0104
A; Molecule type: genomic RNA
A; Residues: 935-941, 'E', 943-976, 'R', 978-997, 'L', 999-1006, 'F', 1008-1056, 'L', 1058-1129, 'L'
A; Cross -references: UNIPARC:UP100000F324C
A; Note: the authors translated the codon GAA for residue 942 as Clm and Clm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Map position: 9L (;Superfamily: Saccharomyces probable membrane C;Keywords: transmembrane protein F;6-22/Domain: transmembrane #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               submitted to the EMBL Data Library, A;Reference number: $48407 A;Accession: $48420 A;Accession: $48420 A;Molecule type: DNA A;Residues: 1-121 <SMI>A;Cross-references: UNIPROT:P40520;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              probable membrane protein YIL059c - yeast (Saccharomyces cerevisiae)
C;Species: Saccharomyces cerevisiae
C;Date: 02-Dec-1994 #sequence_revision 02-Dec-1994 #text_change 09-Jul-2004
C;Accession: S48420
R;Smith, V.
R;Kodaira, K.I.; Oki, M.; Kakikawa, M.; Watanabe, N.; Hirakawa, M.; Yamada, Gene 187, 45-53, 1997
A;Title: Genome structure of the Lactobacillus temperate phage phi gle: the A;Reference number: Z17631; MUID:97225795; PMID:9073065
                                                                                                hypothetical protein 1143 - Lactobacillus phage phi-gle C;Species: Lactobacillus phage phi-gle C;Date: 13-Aug-1999 #sequence_revision 13-Aug-1999 #tex C;Accession: T13179
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Best Local S
Matches 7
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;Cross-references: SGD:S0001321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Map position:
Superfamily: 1
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Best Local
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Similarity 28.0%;
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                       AEFRHDSGYEVH---HQKLVFFAEDVGSNKG 29
                                                                                                                                                                                                                                                                                                                     AEFDFDVGYEEFVRTNPDTIFLESDIGLHVG 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FHFDEALKVHYGAIMFCADKLGASE 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FRHDSGYEVHHQKLVFFAEDVGSNK 28
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barley stripe mosaic virus alpha-a protein
                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     26.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                            4.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Score 43.5; D
Pred. No. 37;
4; Mismatches
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Pred. No. 3
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                                                                                                                            13-Aug-1999 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
3.7e+02;
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                            genome
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C;Accession:
                                                                                 A;Map position: I
C;Superfamily: Na(+)/H(+)
C;Keywords: hydrolase
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C; Superfamily:
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Best Local
      Query Match
Best Local Similarity
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      26.9%;
                                                                                                          antiporter 1/protease
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RESULT 81
A13443
Na+/H+ antiporter 1 / proteinase IV (EC 3.4.-.) [imported] - proteinase IV (EC 
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A;Status: translated from GB/EMBL/DDBJ
A;Status: translated from GB/EMBL/DDBJ
A;Rolecule type: DNA
A;Residuse: 1-143 <KOD>
A;Residuse: 1-143 <KOD>
A;Cross-references: UNIPARC:UPI00009B29A; EMBL:X98106; NID:g1926320; PIDN:CAA66783.1;
A;Experimental source: specific_host Lactobacillus
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RiGregory, J.

Right Data Library,

A;Reference number: Z19488

A;Accession: T21923
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Gene: CESP: F37H8.1
A; Map position: 2
A; Introns: 23/3; 81/2; 132/2; 168/3; 257/2
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A;Molecule type: DNA
A;Residues: 1-264 <WIL>
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Pred. No. 4
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Score Pred.

43.5; No. 2.

DB 2; .8e+02;

Length

763;

IV-related

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RESULT 84
F69770
hypothetical
                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-1493 <AQF>
A;Cross-references: UNIPROT:067512;
A;Cross-references: Strain VF5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                glutamate synthase (ferredoxin)
C; Species: Aquifex aeolicus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nature 392,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
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A;Residues: 1-1141 <BEV>
A;Residues: 1-1141 <BEV>
A;Cross-references: UNIPROT:065598; UNIPARC:UPI00000A4AD7; EMBL:AL022223
A;Experimental source: cultivar Columbia; BAC clone M3E9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          submitted to the Protein S
A; Reference number: Z15396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein M3E9.210 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 23-Apr-1999 #sequence_revision 23-Apr-1999 #
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Title: The complete genome of the hyperthermophilic bacterium Aquifex aeolicus.
A;Reference number: A70300; MUID:98196666; PMID:9537320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Deckert,
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                                                                                                                                                   Query Match
Best Local S
Matches 10
                                                                                                                                                                                                                                                                                                       ;Gene: gltB
;Superfamily: glutamate_synthase, large subunit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;Species: Aquifex aeolicus;Date: 08-May-1998 #sequence_revision;Accession: F70435
                                                                                                                                                                                                                      ;1117,1123,1128/Binding
                                                                                                                                                                                                                                    ;8-1493/Product: glutamate synthase #;8/Active site: Cys #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                       Status: preliminary; nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Accession: T05068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;Bevan, M.; Vandenbol, M.; Jallet, C.; Portetelle,
                                                                                                                                                                                                                                                                    1-7/Domain: propeptide #status predicted <PRO>
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Best Local
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                                                                                                                                                                                                                                                                                         Keywords: 3Fe-4S; metalloprotein; oxidoreductase
                                                                                                                                                                                                                                                                                                                                            Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Introns: 463/3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G.; Warren, P.V.; Gaasterland,
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                                                                                                                                                     l Similarity
10; Conserv
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 protein
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                                                                                                                    RHDSGYEVHHOKLVFFAEDVGSNKGA 30
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   Bacillus subtilis
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Pred. No. 5.9e
4; Mismatches
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Pred. No. 4.4e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                          UNIPARC: UPI000005665F;
                                                                                                                                                                                                                                                                                                                                                                                                                           sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.4.7.1) precursor [similarity] - Aquifex aeolicus
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4.4e+02;
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1999
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                                                                                                                                                                                                                      (covalent) #status
                                                                                                                                                                                   Length 1493;
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د.
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                                                                                                                                                                                                                        predicted
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C;Species: Bacillus subtilis
C;Date: 05-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
C;Accession: F69770
R;Kunst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.; Alloni, G.; Azevedo, V.; Berte
C; Bron, S.; Brouillet, S.; Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.; Ch
A.; Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.; Fabret, C.; Ferrari, E
Nature 390, 249-256, 1997
A;Authors: Foulger, D.; Fritz, C.; Fujita, M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galle
iech, J.; Harwood, C.R.; Henaut, A.; Hibert, H.; Holsappel, S.; Hosono, S.; Hullo, M.F
Koetter, P.; Koningstein, G.; Krogh, S.; Kumano, M.; Kurita, K.; Lapidus, A.; Lardinois,
A;Authors: Lauber, J.; Lazarevic, V.; Lee, S.M.; Levine, A.; Liu, H.; Masuda, S.; Mauee
y, M.; Ogawa, K.; Ogiwara, A.; Oudega, B.; Park, S.H.; Parro, V.; Pohl, T.M.; Portetell!
Rieger, M.; Rivolta, C.; Rocha, E.; Roche, B.; Rose, M.; Sadaie, Y.; Sato, T.; Scanlon,
A;Authors: Schleich, S.; Schroeter, R.; Scoffone, F.; Sekiguchi, J.; Sekowska, A.; Serol
akeuchi, M.; Tamakoshi, A.; Tanaka, T.; Terpstra, P.; Tognoni, A.; Tosato, V.; Uchiyamal
T; Winters, P.; Wipat, A.; Yamamoto, H.; Yamane, K.; Yasumoto, K.; Yata, K.; Yoshida,
A;Title: The complete genome sequence of the Gram-positive bacterium Bacillus subtilis.
A;Reference number: A69580; MUID:98044033; PMID:9384377
                                                                                                                                                                                           RESULT 86
S74834
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JC7732
                    C;Accession: S74834
R;Kaneko, T.; Sato,
o, K.; Okumura, S.;
                                                                                        C;Species: Synechocystis
A;Variety: PCC 6803
C;Date: 25-Apr-1997 #sequ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J. Biochem. 130, 431-438, 2001
A;Title: Domain and genomic sequence analysis of bdellin-KL,
A;Reference number: JC7732; MUID:21421308; PMID:11530020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        trypsin-plasmin inhibitor, bdellin-KL - Korean leech
C;Species: Hirudo nipponia (Korean leech)
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #
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A; Residues: 1-155 < KIM>
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                                                                                                                                                                 hypothetical protein sll0854 -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Status: preliminary; nucleic acid sequence not shown; translation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ing region for charged molecules.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:P96598;
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Best Local
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S.; Kotani,
; Shimpo, S.;
5, 1996
                                                                                             #sequence_revision 25-Apr-1997 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                                               26.5%;
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45.5%;
                                                                                                                                                                    Synechocystis sp. (strain PCC 6803)
                      H.; Tanaka, A.; Asamizu, Takeuchi, C.; Wada, T.; V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 43; DB
Pred. No. 43;
3; Mismatches
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Pred. No.
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                         Watanabe, A.; Yamada,
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                           Y.; Miyajima,
Yamada, M.; Ya
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109-136

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RESULT 88
AD1201
N-acyl-L-amino acid amidohydrolases homolog lmol012 [imported] - Listeria monocytogenes C; Species: Listeria monocytogenes C; Species: Listeria monocytogenes C; Species: Listeria monocytogenes C; Species: AD1201
C; Accession: AD1201
R; Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bloecker.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsihi, H. D.; Jones, L.M.; Karst, U.
Science 294, 849-852, 2001
A; Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A.; May, C.; Schlueter, T.; Simoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; Wehland, A; Fitle: Comparative genomics of Listeria species.
A; Reference number: AB1077; MUID:21537279; PMID:11679669
A; Accession: AD1201
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-371 <GLA>
A; Cross-references: UNIPROT:0878A0; UNIPARC:UPI00000CF129; GB:NC_003210; PIDN:CAC99090.1
A; Experimental source: strain EGD-e
C; Superfamily: Hippurate hydrolase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       algral transduction histidine kinase Cj0793 [imported] - Campylobacter jejuni (strain NC (Species: Campylobacter jejuni (c.)Species: Campylobacter jejuni (c.)Species: Campylobacter jejuni (c.)Bate: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 09-Jul-2004 (c.)Accession: A81351 (c.)Accession: A81351 (d.)Accession: A81351 (d.)Accession: A81351 (d.)Accession: A81351 (d.)Accession: A81250; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin (c.)Accession: A81250; Mungall, K.; Ketley, J.M.; Churcher, C.; Basham, D.; Chillin (d.)Accession: A81351 (d.)Ac
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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-308 «KAN»
A;Cross-references: UNIPROT:P73746; UNIPARC:UPI00000C0D8E; EMBL:D90909; GB:AB001339;
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
C;Superfamily: Synechocystis hypothetical protein sll0854
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l Similarity 41.7%;
10; Conservative
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11; Conservative
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Pred. No. 1.4e+02;
4; Mismatches 10;
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A; Residues: 1-382 <S
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Il Similarity 45.8%;
11; Conservative
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RESULT 90

B86268

B86268

F1384.1 protein. - Arabidopsis thaliana (mouse-ear cress)

C;Species: Arabidopsis thaliana (mouse-ear cress)

C;Species: Arabidopsis thaliana (mouse-ear cress)

C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004

C;Accession: B86268

R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alon

Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar,

Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar,

nsen, N.F.; Hughes, B.; Huizar, L.

Nature 408, 816-820, 2000

A;Authors: Hunter J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, B.; Kim,

C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marzia

A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallo:

ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.

A;Reference number: A86141; MUID:21016719; PMID:11130712

A;Accession: B86268

A;Sparis, nrellminary
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A;Molecule type: DNA
A;Residues: 1-371 <GLA>
A;Residues: 1-371 <GLA>
A;Coss-references: UNIPROT:092D10; UNIPARC:UPI00000CC41F; GB:AL592022; PIDN:CAC96242.1
A;Cross-nental source: strain Clip11262
C;Genetics:
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C,Accession: AB1559
R,Glaser, P.; Frangeul, L.; Buchrieser, C.; Amend, A.; Baquero, F.; Berche, P.; Bl.; Dominguez-Bernal, G.; Duchaud, E.; Durand, L.; Dussurget, O.; Entian, K.D.; Fsi. D.; Jones, L.M.; Karst, U. Science 294, 849-852, 2001
D.; Jones, L.M.; Karst, U. Science 294, 849-852, 2001
A,Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A,Authors: Kreft, J.; Kuhn, M.; Kunst, F.; Kurapkat, G.; Madueno, E.; Maitournam, A,Authors: Kreft, J.; Kimoes, N.; Tierrez, A.; Vazquez-Boland, J.A.; Voss, H.; We A, Title: Comparative genomics of Listeria species.
A,Reference number: AB1077; MUID:21537279; PMID:11679669
A,Accession: AB1559
                                                                                                                                                                                                                                                                                                                                                                                                                                             Residues: 1-382 <STO>
CTOSS-references: UNIPROT:Q9FZ74; UNIPARC:UPI00000A5523; GB:AE005172; NID:g9802750;
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Similarity 45.8%; Pred. No. 1.5e+02;
11; Conservative 2; Mismatches 5;
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Nature 393,
A;Authors: K
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A49388
                                                                                                                                                  probable cobQ protein - Mycobacterium tuberculosis (strain H37RV)
C;Species: Mycobacterium tuberculosis
C;Species: Mycobacterium tuberculosis
C;Species: T-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
C;Accession: C70940
C;Accession: C70940
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Cole, S.T.; Churcher, C.; Harris, R; Cole, C.; Cole, S.T.; Churcher, C.; Harris, R; Cole, C.; Churcher, C.;
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A;Residues: 1-489 <CHES
A;Cross-references: UNIPARC:UPI000016DE70; GB:U03473; NID:g436477; PIDN:AAC48918.1;
C;Superfamily: catalase
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A;Authors: Hou, S.; Daniels, C.J.; Dennis, P.P.; Omer, A.D.;
A;Title: Genome sequence of Halobacterium species NRC-1.
A;Reference number: A84160; MUID:20504483; PMID:11016950
A;Accession: A84262
A;Greence and Agent Age
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A;Accession: A49388
A;Status: preliminary
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A; Residues: 1-452 <STO>
A; Cross-references: UNI
C; Genetics:
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Proc. Natl. Acad. Sci. U.S.A. 97, 12176-12181, 2000
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Best Local S
Matches
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;Species: Halobacterium sp. NRC-1
;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001 #text_change 09-Jul-2004
;Accession: A84262
                                                                                                                             Connor,
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Best Local
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                                                                             R.; Davies, R.;
3, 537-544, 1998
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Krogh, A.; McLean, J.; Moule,
K.; Whitehead, S.; Barrell, B.
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Devlin, K.; Fo
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Pred. No. 1.9e
0; Mismatches
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Pred. No. 2e+02;
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                                                                                                                T.; Churcher, C.; Harri
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                                                                                                                    Holroyd,
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G.; Jabl
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C;Keywords: heme; iron; metalloprotein F;318-481/Domain: cytochrome P450 homology F;459/Binding site: heme iron (Cys) (axial
                                                                                                                                                                                                                                                                                                        Plant Sci. 96, 129-136, 199
A; Title: Gene and cDNA for
A; Reference number: 216915
                                                                                                                                                                                                                                                                                                                                                                                               cytochrome P450 (CYP72C) - Madagascar periwinkle (fragment)
C;Species: Catharanthus roseus (Madagascar periwinkle)
C;Date: 16-U1-1999 #sequence_revision 16-U1-1999 #text_change 05-Oct-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A,Title: Deciphering the biology of Mycobacterium tuberculosis A;Reference number: A70500; MUID:98295987; PMID:9634230 A;Accession: C70940 A;Status: preliminary; nucleic acid sequence not shown; transla
                                                                                                                                                                                                  A;Cross-references: UNI
A;Experimental source:
                                                                                                                                                                                                                                                                                                                                                           R; Mangold, U.; Bichel, J.; Batschauer, A.; Lanz, T.; Kaiser,
                                                                                                                                                                                                                                                                                                                                                                                   C; Accession: T10000
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A;Experimental source:
                                                                                                                                                            A:Gene: CYP72C
                                                                                                                                                                                                                                                       A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                       A;Accession: T10000
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                                                                                                                                                                                                                                                                    A; Status: preliminary; translated
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                                   Matches
                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391 SGYEIHHGRI
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5 RHDSGYEVHHOKLVFFAEDVGSNKGA 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 6; Conserv
                                   Similarity 30.8
8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SGYEVHIQKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UNIPROT:O53677; UNIPARC:UPI0000127DF9; GB:AL021929;
ce: strain H37Rv
                                                                                                                                                                                                  UNIPROT:Q42701;
ce: cv. cp3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                  26.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26.5%;
                                                                                                                                                                                                                                                                                                                           plant
                                   7; Mismatches
                                                    Score 43; DB 2;
Pred. No. 2.2e+02;
                                                                                                                                                                                                                                                                                                                             cytochrome P450 proteins
                                                                                                                                                                                                                                                                          from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 43; DB 2; Le
Pred. No. 2.1e+02;
3; Mismatches 1;
                                                                                                                                                                                                                   UNIPARC: UPI00000A2837; EMBL: L19075; NID: g404689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthase
                                                                                                                                                                                                                                                                          GB/EMBL/DDBJ
                                                                                                         <P45>
ligand)
                                                                                                         #status predicted
                                                                     Length 516;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 494;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           translation
                                                                                                                                                                                                                                                                                                                              (CYP72 family) from Catharant
                                                                                                                                                                                                                                                                                                                                                                H . .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              from
                                   ٥,
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                                   Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GB:AL123456;
                                   0,
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                                                                                                                                                                                                                                                                                                                                                                  G.; Werc)
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A;Gene: CYP72B
A;Introns: 96/1; 170/:
C;Superfamily: human <
C;Keywords: heme; iron
                                                                                                     A; Experimental C; Genetics:
                                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-524 < MAN>
                                                                                                                                                                                                                                                                          R;Mangold, U.; Eichel, J.; Batschauer, A.; Lanz, T.; Kaiser, Plant Sci. 96, 129-136, 1994
A;Title: Gene and CDNA for plant cytochrome P450 proteins (C)
A;Reference number: Z16915
                                                                                                                                                                                                                                                                                                                                                                                                  cytochrome P450 - Madagascar periwinkle
C;Species: Catharanthus roseus (Madagascar periwinkle)
C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 09-Jul-2004
                                                                                                                             A;Cross-references: UNIPROT:Q42700; A;Experimental source: cv. cp3
                                                                                                                                                                                                                             A; Status: preliminary; translated
                                                                                                                                                                                                                                                          A;Accession: T09999
                                                                                                                                                                                                                                                                                                                                                                                  Accession: T09999
                            170/3; 252/2; 381/3 uman cytochrome P450
                                                                                                                                                                                                                                   from
                                                                                                                                                       UNIPARC:UPI00000AB88E; EMBL:L19074; NID:g404687;
                          CYP4B1;
                                                                                                                                                                                                                                GB/EMBL/DDBC
                          cytochrome
                               P450
                                                                                                                                                                                                                                                                                                            (CYP72
                                                                                                                                                                                                                                                                                                                                                        T.; Spangenberg,
                                                                                                                                                                                                                                                                                                         family)
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G.;

Catharant Werck

PI

115

KYQKNFDVHNPLVKFLLTGVGSFEGA 140

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protein F10A5.13 [imported] - Arabidopsis thaliana
()Species: Arabidopsis thaliana (mouse-ear cress)
()Date: 02-Mar_2010  #sequence_revision 02-Mar_2011 #text_change 09-Jul-2004
(;Accession: E96786
R;Theologis, A; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S; White, O.; Alonso Chin, C.W.; Chung, M.K.; Comn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K. ansen, N.F.; Hughes, B.; Huizar, L.
Nature 408, 816-820, 2010
Nature 408, 816-820, 2010
R,J. A; Liu, J.H.; Liu, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Khaykin, E.; Kim, C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali, A; Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A, Title: Sequence and analysis of Chromosome 1 of the plant Arabidopsis.
A; Accession: E96786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Vetter, H.P.; Mangold, U.; Schroeder, G.; Marner, F.J.; Werck-Reichhart, D.; Plant Physiol. 100, 998-1007, 1992
A;Title: Molecular analysis and heterologous expression of an inducible cytochr A;Reference number: Z16902
A;Recession: T09944
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-524 <VET>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 probable cytochrome P450 protein - Madagascar periwinkle N;Alternate names: CYP72 protein C;Species: Catharanthus roseus (Madagascar periwinkle) C;Date: 16-Jul-1999 #text_C;Accession: T09944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
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                                                                                                                                                                                                    A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-525 <STO>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                       ;Map position: 1
;Superfamily: Arabidopsis membrane-anchored cellulase KOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Superfamily: human cytochrome P450 CYP4B1; cytochrome P450 homology; keywords: heme; iron; metalloprotein; keywords: heme; iron; metalloprotein; 2329-492/Domain: cytochrome P450 homology <P45>;470/Binding site: heme iron (Cys) (axial ligand) #status predicted;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
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Query Match
Best Local
                                                                                                                               Gene: F10A5.13
                                                                                                                                                    Genetics:
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                                                                                                                                                                         Cross-references: UNIPROT:Q9LR07; UNIPARC:UPI00000AC71F; GB:AE005173; NID:g9369363;
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     126 KYQKNFDVHNPLVKFLLTGVGSFEGA 151
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8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26.5%;
larity 30.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26.5%; Score 43; DB 2;
30.8%; Pred. No. 2.2e+0;
tive 7; Mismatches
26.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .(Madagascar periwinkle)
revision 16-Jul-1999 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7; Mismatches
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Pred. No. 2
Score 43;
Pred. No.
  .2e+02;
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                          Length 525;
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A;Cross-references: UNIPROT:Q9PGS7; UNIPARC:UPI00000C2333; GB:AE003875; GB:AE003849; NI-A;Experimental source: strain 9a5c R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Briones, M.R.S.; Bueno, M.R.P.; Camargo, A.A.; Camargo, L.E.A.; Carraro, D.M.; Carrer, Ias-Neto, E.; Docena, C.; El-Dorry, H.; Facincani, A.P.; Ferreira, A.J.S.
                                                                                                                         A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-613 <SIM>
                                                                                                                                                                                                       A; Accession: A82834
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A;Introns: 42/1; 124/3; 184/3; 265/3; 348/3; 385/2; 415/2; 499/3
A;Note: Y398B.ff
C;Superfamily: protein phosphatase 5; phosphoesterase core homology; phosphoprotein c;Keywords: iron; metalloprotein; nucleus; phosphoric monoester hydrolase; zinc F;29-61/Domain: tetratricopeptide repeat homology <TT1>
F;62-95/Domain: tetratricopeptide repeat homology <TT3>
F;20-129/Domain: tetratricopeptide repeat homology <TT3>
F;203-497/Domain: phosphoprotein phosphatase homology <PEC>
F;335-304/Domain: phosphoprotein phosphatase homology <PEC>
F;235-304/Domain: phosphoprotein phosphatase homology <PEC>
F;241,243,279/Binding site: iron (Asp, His, Asp) #status predicted
F;273,303,480/Acctive site: Asp, His, Tyr #status predicted
F;273,404,229/Binding site: substrate phosphate (Arg) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B.; O'Callaghan, M.; Parsons, J.; Percy, C.; Rifken, L.; Roopra, A.; Saunders, D. Nature 368, 32-38, 1994
A;Authors: Shownkeen, R.; Sims, M.; Smaldon, N.; Smith, A.; Smith, M.; Sonnhammer, E.; : tock, L.; Wilkinson-Sproat, J.; Wohldman, P.
A;Title: 2.2 Mb of contiguous nucleotide sequence from chromosome III of C. elegans. A;Reference number: 843531; MUID:94150718; PMID:7906398
A;Accession: T45058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: DNA
A;Residues: 1-526 <WIL>
A;Cross-references: UNIPARC:UPI0000083436; EMBL:AL132896; NID:g6434440; PIDN:CAB60937.1,
A;Experimental source: clone Y39B6B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Wilson, R.; Ainscough, R.; Anderson, K.; Baynes, C.; Berks, M.; Bonfield, J.; I raser, A.; Fulton, L.; Gardner, A.; Green, P.; Hawkins, T.; Hillier, L.; Jier, M. B.; O'Callaghan, M.; Parsons, J.; Percy, C.; Rifken, L.; Roopra, A.; Saunders, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            phosphoprotein phosphatase (EC 3.1.3.16) Y39B6B.ff [similarity] - Caenorhabditis elegan: N;Alternate names: serine/threonine phosphatase PP5 homolog C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: O3-Aug-2001 #sequence_revision O3-Aug-2001 #text_change 28-Apr-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Map position: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: translated from GB/EMBL/DDBJ
                                                                                                                                                           Query Match
Best Local
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462 GYEMHHNGQCFTVFSAPNYCDQMNNKGA
                                                                                                                               ch 26.5%; l Similarity 46.4%; 13; Conservative
                                                           9 GYEVHHQK---LVFFAE---DVGSNKGA 30
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                                                                                                                               2;
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                                                                                                                               Score 43; DB 1; Lo
Pred. No. 2.2e+02;
2; Mismatches 7;
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M.; John:
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A;Gene: SGD:FRE7

A;Gene: SGD:FRE7

A;Cross-references: SGD:S0005512; MIPS:YOL152w

A;Map position: 15L

C;Keywords: transmembrane protein

F;50-66/Domain: transmembrane #status predicted <TM1>
F;125-141/Domain: transmembrane #status predicted <TM2>
F;125-141/Domain: transmembrane #status predicted <TM3>
F;200-216/Domain: transmembrane #status predicted <TM5>
F;242-258/Domain: transmembrane #status predicted <TM5>
F;266-82/Domain: transmembrane #status predicted <TM6>
F;267-313/Domain: transmembrane #status predicted <TM6>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      probable membrane protein YOL152w - yeast (Saccharomyces cerevisiae)
N;Alternate names: hypothetical protein AOB629; hypothetical protein O0443
C;Species: Saccharomyces cerevisiae
C;Date: 10-Apr-1996 #sequence revision 19-Apr-1996 #revt characteristics
C;Accession: S60385: S66040 France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Casas, M.; Casas, C.; Herrero, E.; Gamo, F.J.; Lafuente, M.J.; Gancedo. Yeast 11, 1281-1288, 1995
A;Title: DNA sequence analysis of a 13 kbp fragment of the left arm of yeast chromosome A;Reference number: S60385; MUID:96132030; PMID:8553699
A;Sterence number: S60385
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A; Authors: Perreira, V.C.A.; Perro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohn J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.E.; Laigr Chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Marcins, E. A; Authors: Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.P. Rodrigues, V.; Rosa, A.J. de M.; de Rodrigues, V.; Rosa, A.J. de M.; de Rodrigues, V.; Rosa, A.C.R.; da Silva, F.R.; da Silva, R.G.; Silva Jr., W.A.; da Silvaida, A; Silva Jr., W.A.; da Silvaida, A; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: UNIPARC:UPI000012ABFA; EMBL:Z74894; NID:g1420058; PID:e251928; PID:
A;Experimental source: strain S288C
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Date: 10-Apr-1996 #sequence revision 19-Apr-1996 #text_change 09-Jul-2004
C;Accession: S60385; S66849; S57673
R;Casamayor, A.; Aldea, M.; Casas, C.; Herrero, E.; Gamo, F.J.; Lafuente, M
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A; Residues: 1-629 < ARI>
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A; Accession: S66849
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Q6TH29_CHICK
Q9PUL1_CHICK
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1 xenopus lae
6 xenopus tro
3 m amyloid b
2 r amyloid b
3 mus musculu
7 rattus norv
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mus musculu
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RESULT 1

OSUC33_HUMAN

OSUC33_HUMAN

DOSUC33_HUMAN

AC

OSUC33_HUMAN

AC

OSUC33_HUMAN

AC

OSUC33_HUMAN

DT

O1-MAY-2000 (TrEMBLrel. 13, Last sequence update)

DT

O1-MAY-2000 (TrEMBLrel. 26, Last annotation update)

DT

O1-MAY-2000 (TrEMBLrel. 26, Last annotation update)

DE

Beta-amyloid peptide (Fragment).

OS

Homo sapiens (Human).

OC

Mammalia; Eutheria; Evarchontoglires; Primates; Catarrhini; Hominidae;

OC

Homo.

OC

NCB1_TaxID=9606;

RN

[1]

RX

PROTEIN SEQUENCE.

RX

PROTEIN SEQUENCE.

RX

Sinha S., Schlossmacher M., Waley J., Lee M., Dovey H., Davis D.,

Seubert P., Vigo-Pelfrey C., Esch P., Lee M., Dovey H., Davis D.,

Sinha S., Schlossmacher M., Waley J., Swindlehurst C.;

Tsolation and quantification of soluble Alzheimer's beta-peptide from

biological fluids.";

RI

RY

RI

RY

Tsolation and quantification of soluble Alzheimer's beta-peptide from

biological fluids.";

RI

RAULT 359:325-327(1992).

DR

GO; GO:0005488; Fibinding; IEA.

DR

GO; GO:000548; Fibinding; IEA.

DR

FRINTS; PRO0204; BETPAMYLOID.

SQ SEQUENCE 33 AA; 3674 MW; BIDEFE2F4167ABD0 CRC64;
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PROTEIN SEQUENCE.

MEDLINE-93024877; PubMed=1406936; DOI=10.1038/359325a0;

MEDLINE-93024877; PubMed=1406936; DOI=10.1038/359325a0;

MEDLINE-93024877; PubMed=1406936; DOI=10.1038/359325a0;

MEDLINE-93024877; PubMed=1406936; DOI=10.1038/359325a0;

MEDLINE-93025487; PubMed=1406936; DOI=10.1038/359325a0;

MEDLINE-93025487; DOI=10.1038/359325a0;

MEDLINE-9403648; Fibinding; IEA.

MEDLINE-9403648; Fibinding; IEA.

MEDLINE-9403648; Fibinding; IEA.

MEDLINE-9403648; Fibinding; IEA.

MEDLINE-94036488; Fibinding; IEA.

MEDLINE-940364889; Fibinding; IEA.

MEDLINE-94036489; Fibinding; IEA.

MEDLINE-94036489; Fibinding; IEA.

MEDLINE-94036489; Fibinding; IEA.

MEDLINE-9302648789; BETAMMICOID.

MEDLINE-9302649; BETAMMICOID.
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Matches 30
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QSGJJ6;

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ilarity 100.0%;
Conservative 0;
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Pred. No. 1.1e-16;
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MEDLINE=93290653; PubMed=7685598;

MEDLINE=93290653; PubMed=7685598;

Shinohigashi Y., Matsumoto H., Takano Y., Saito R.,

Kamiya H., Ohno M.;

"Receptor-mediated specific biological activity of a protein fragment for NK-1 substance p receptors.";

protein fragment for NK-1 substance p receptors.";

Biochem. Biophys. Res. Commun. 193:624-630(1993).

Restriction of the protein for No. 124.

Restriction of No. 124.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q7MO88 CAVPO PRELIMINARY; PRT; 42 AA.
Q7MO88 CAVPO PRT;
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Q56JJ7]
10-MAY-2005 (TrEMBLrel. 30, Created)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Amyloid beta protein (Fragment).
Tursiops truncatus (Atlantic bottle-nosed dolphin).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Laurasiatheria; Cetartiodactyla; Cetacea;
Odontoceti; Delphinidae; Tursiops.
NCBI TaxID=9739;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AY
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"The molecular machinery of
Submitted (FEB-2005) to the
EMBL; AY926588; AAX81917.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQÜENCE
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42 AA;
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larity 100.0%; I
Conservative 0;
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4514 MW;
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EMBL/GenBank/DDBJ databases
-; mRNA.
                                                                                                                                                                                                                                                  3AC85563D7858C37 CRC64;
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Pred. No. 1.4
); Mismatches
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Pred. No. 1
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. No. 1.4e-16; smatches 0;
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1.4e-16;
es 0;
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RESULT 5

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RESULT 6
A4_CANFA
ID A4_C
AC Q282
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01-NOV-1997 (Rel. 35, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
11-MAY-2005 (Rel. 47, Last annotation update)
11-MAY-2005 (Rel. 47, Last annotation update)
11-MAY-2005 (Rel. 47, Last annotation update)
12-MAY-2005 (Rel. 47, Last annotation update)
13-MAY-2005 (Rel. 47, Last annotation u
A4_CANFA
Q28280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F; Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.; "Conservation of the sequence of the Alzheimer's disease amyloid peptide in dog, polar bear and five other mammals by cross-species polymerase chain reaction analysis."; Brain Res. Mol. Brain Res. 10:299-305(1991).

-I-FUNCTION: Functional neuronal receptor which couples to intracellular signaling pathway through the GTP-binding protein G(O) (By similarity).
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TRANSMEM
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SEQUENCE
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Ursus maritimus (Polar bear) (Thalarctos maritimus).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Carnivora; Fissipedia; Ursida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This Swiss-Prot entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entropean Bioinformatics Institute. There are no restruse as long as its content is in no way modified and this s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- SUBCELLŪLAR LOCATION: Type I membrane protein.
-!- SIMILARITY: Belongs to the APP family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            removed
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B60045; B60045.
; P08592; 1NMJ.
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larity 100.0%; !
Conservative 0;
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                                                                                                                                                                                                                             6172 MW;
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                                                                                                                                                                                                                                                                                          Soluble APP-beta (By similarity).

CTF-alpha (By similarity).

Beta-amyloid protein 42 (By similarity).

Beta-amyloid protein 40 (By similarity).

Gamma-CTF(59) (By similarity).

Gamma-CTF(57) (By similarity).

Extracellular (Potential).
                                                                                                                                                              Score 162; DB 1
Pred. No. 2e-16;
Mismatches
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                  PRT;
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   RESULT 7
A4_RABIT
ID A4_F
AC Q287
DT 01-N
DT 01-N
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A4 RABIT Q28748; 01-NOV-1997 01-NOV-1997

STANDARD;

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C MEDILINE-92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Little S.P.;

A Johnstone E.M., Chaney M.O., Norris F.H., Little S.P.;

A Johnstone E.M., Little S.P.;

A Johnstone E.M., Little 
                                                                                                                        Query Match
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01-NOV-1997 (Rel. 35, Last sequence update)
10-MAY-2005 (Rel. 47, Last amoutation update)
10-MAY-2005 (Rel. 47, Last amoutation update)
Alzheimer's disease amyloid A4 protein homolog (Contains: Soluble APP beta (S-APP-beta); CTF-alpha; Beta-amyloid protein 42 (Beta-APP42);
Beta-amyloid protein 40 (Beta-APP40); Gamma-CTF(59) (Gamma-secretase C-terminal fragment 59); Gamma-CTF(57) (Gamma-secretase C-terminal fragment 59); Gamma-CTF(57)
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PROSITE;
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InterPro; IPRO01255; BeTa-APP.
PANTHER; PTHR10083:SP6; Beta-APP;
Pfam; PF03494; Beta-APP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ensembl; ENSCAFG00000008557; Canis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           between
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Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9615;
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P08592; 1NMJ.
      7
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                                                                                                                                                                                                                                                                                                                                        Transmembrane. 6
<1 6
<1 958
7 48
7 46
7 46
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47 >58
47 >58
49 58
M <1 34
M 35 58
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; PS00319; A4_EXTRA; F
; PS00320; A4_INTRA; F
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                                          DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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llarity 100.0%;
Conservative 0
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CTF-alpha (By similarity).

Beta-amyloid protein 42 (By similarity).

Beta-amyloid protein 40 (By similarity).

Gamma-CTF(59) (By similarity).

Gamma-CTF(57) (By similarity).
                                                                                                                                                                                                                                                    8469D488A2E12DFA
                                                                                                                                                                                                                                                                                                                                               Extracellular (Potential). Potential.
                                                                                                                     Score 162; DB 1
Pred. No. 2e-16;
Mismatches
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      36
                                                                                                                                                                                      DB 1;
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ipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 restrictions
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RESULT 8
A4_SHEEP
ID A4 SHEEP
AC Q28757;
DT 01-NOV-1997
DT 01-NOV-1997
DT 10-MAY-2005
DE Alzheimer's
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(P NUCLEOTIDE SEQUENCE.

(P NUCLEOTIDE SEQUENCE.

(P NUCLEOTIDE SEQUENCE.

(C TISSUE-Brain;

AX MEDLINE-92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F;

RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

RA Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

RT polymerase chain resequence of the Alzheiner's disease amyloid

RT polymerase chain reaction analysis ";

RL Brain Res. Mol. Brain Res. 10:299-305(1991).

CC -!- FUNCTION: Functional neuronal receptor which couples to

Intracellular signaling pathway through the GTP-binding protein

CC G(0) (By similarity).

CC --- SUBCELIULAR LOCATION: Type I membrane protein.

CC --- SIMILARITY: Belongs to the APP family.
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                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 30
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HSSP; P08592; INNJ.
InterPro; IPRO0155; Beta-APP.
InterPro; IPRO01255; Beta-APP.
PANTHER; PTHR10083:SP6; Beta-APP; 1.
Pfam; PF03494; Beta-APP; 1.
PF1NTS; PF03494; Beta-APP; 1.
PROSITE; PS00319; A4 EXTRA; PARTIAL.
PROSITE; PS00319; A4 INTRA; PARTIAL.
PROSITE; PS00320; A4 INTRA; PARTIAL.
AMPLOIG; TVALEMENDETANE.
CHAIN
C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- SUNCELIULAR LOCATION: Type I membrane protein.
-!- SIMILARITY: Belongs to the APP family.

This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.
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Alzheimer's disease amyloid A4 protein homolog (Contains: Soluble API
beta (S-APP-beta); CTF-alpha; Beta-amyloid protein 42 (Beta-APP42);
Beta-amyloid protein 40 (Beta-APP40); Gamma-CTF(59) (Gamma-secretase
C-terminal fragment 59); Gamma-CTF(57) (Gamma-secretase C-terminal fragment 59); (Fragment 57)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oryctolagus cuniculus (Rabbit).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Lagomorpha; Leporidae;
                                                                                                                                                                                                                                                                 ch 100.0%; 1 Similarity 100.0%; 30; Conservative (
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                                                                                                                                                                                                                  DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                    (Rel.
(Rel.
(Rel.
                                                                                              STANDARD;
                    35,
47,
    amyloid
, Created)
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, Last annotation
amyloid A4 prote
                                                                                                                                                                                                                                                                                                                                                                                                  Soluble App-beta (By similarity).

CTF-alpha (By similarity).

Beta-amyloid protein 42 (By similarity).

Beta-amyloid protein 40 (By similarity).

Gamma-CTF(59) (By similarity).

Extracellular (Potential).

Potential.

Cytoplasmic (Potential).
                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                 Score 162; DB 1
Pred. No. 2e-16;
Mismatches
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  e update)
ion update)
tein homolog
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RESULT 9
A4 BOVIN
ID A4 B
AC Q280
DT 01-N
DT 10-M
DT 10-M
DE Allah
DE Beta
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Matches 30
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PRINTS; PR00204; BETAAMYLOID.

PROSITE; PS00319; A4 EXTRA; PJ
PROSITE; PS00320; A4 INTRA; PJ
Amyloid; Transmembrane.

CHAIN

CH
A4 BOVIN

STANDARD;

PRT;

28053;

01-NOV-1997 (Rel. 35, Created)

10-NOV-1997 (Rel. 35, Last sequence update)

10-NAY-2005 (Rel. 47, Last annotation update)

10-MAY-2005 (Rel. 47, Last annotation update)

Alzheimer's disease amyloid A4 protein homolog [Contains: beta (S-APP-beta); CTF-alpha; Beta-amyloid protein 42 (Bet beta (S-APP-beta); CTF-alpha; Beta-amyloid protein 49 (Gamma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; X56130; CAA39595.1; -; ml
HSSP; D08592; INMJ.
InterPro; IPR008155; A4 APP.
InterPro; IPR001255; Beta-APP.
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TISSUB-Heart;

MEDLINE=92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F;

MEDLINE=92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F;

Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.;

"Conservation of the sequence of the Alzheimer's disease amyloid

peptide in dog, polar bear and five other mammals by cross-species

polymerase chain reaction analysis";

Brain Res. Mol. Brain Res. 10:299-305(1991).

"I FUNCTION: Functional neuronal receptor which couples to

intracellular signaling pathway through the GTP-binding protein

"I SUBCELULUAR LOCATION: Type I membrane protein."

"I SUBCELULUAR LOCATION: Type I membrane protein."
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Name-APP;
Ovis aries (Sheep).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Bute Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Rum Pecora; Bovidae; Caprinae; Ovis.

NCBI TaxID=9940;
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CTP-alpha (By similarity).
Beta-amyloid protein 42 (By similarity).
Beta-amyloid protein 40 (By similarity).
Gamma-CTF(59) (By similarity).
Gamma-CTF(57) (By similarity).
Extracellular (Potential).
Potential.
Cytoplasmic (Potential).
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Pred.
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; Ruminantia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Beta-APP42);
Gamma-secretase
se C-terminal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 58;
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L outstation -
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On
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(Beta-APP4

C-terminal fragment 59);
fragment 57)] (Fragment)

Gamma-CTF(57) (Gamma-secretase C-terminal

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RESULT 10
QBJH58 CHESE
ID QBJH58;
AC QBJH58;
DT 01-0CT-2
DT 01-MAR-2
DT 01-MAR-2
DT 01-MAR-2
OC Eukaryot
OC Testudin
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Best Local S
Matches 30
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SEQUENCE
QŪJH58_CHESE PRELIMINARY; PRT; 113 AA.

QBJH58;

QBJH58;

Q1-QCT-2002 (TrEMBLrel. 22, Created)

Q1-QCT-2002 (TrEMBLrel. 22, Last sequence update)

Q1-MAR-2004 (TrEMBLrel. 26, Last annotation update)

Amyloid beta protein (Fragment).

Chelydra serpentina serpentina (common snapping turtle).

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutei

Testudines; Cryptodira; Testudinoidea; Chelydridae; Chely
                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE;
PROSITE;
Amyloid;
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NCBI_Tax
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polymerase chain reaction analysis.";
Brain Res. Mol. Brain Res. 10:299-305(1991).

-!- FUNCTION: Functional neuronal receptor which cintracellular signaling pathway through the GT G(0) (By similarity).

-!- SUBCELLULAR LOCATION: Type I membrane protein.
-!- SIMILARITY: Belongs to the APP family.
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"Conservation of the sequence of
peptide in dog, polar bear and fi
polymerase chain reaction analysi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F; Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P.; Johnstone E.M. the sequence of the Albheimer's disease amyloid peptide in dog, polar bear and five other mammals by cross-species
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PANTHER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Brain
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                                                                                                                                                                                                                                                                                                                                                                                                                                     PRINTS; PR00204; BETAAMYLOID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF03494; Beta-APP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro; IPR001255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X56124; CAA39589.1; -;
X56126; CAA39591.1; -;
P08592; INMJ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         long as
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; IPR001255; Beta-APP.
PTHR10083:SF6; Beta-APP;
                                                                                                                                                                      DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                          DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                      59
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                                                                                                                                                                                                                                                                                      Extracellular Potential. Cytoplasmic (P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA.
                                                                                                                                                                                                                                                                                                                         Soluble APP-beta (By similarity).

CTF-alpha (By similarity).

Beta-amyloid protein 42 (By similarity).

Beta-amyloid protein 40 (By similarity).

Gamma-CTF(59) (By similarity).

Gamma-CTF(57) (By similarity).
                                                                                                                                                                                                     Score 162; DB 1;
Pred. No. 2.1e-16;
); Mismatches 0;
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                                                                                                                                                                                                                             Length 59;
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   Euteleostomi;
Chelydra.
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RESULT 11
O93296 CHICK
ID O93296 CHICK F
AC O93296;
DT 01-NOV-1998 (1
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Best Local S
Matches 30
Query Match 100
Best Local Similarity 100
Matches 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Trudeau V.I., Chiu S., Kennedy S.W., Brooks R.

"Octylphenol (OP) alters the expression of memi protein family in the hypothalamus of the snap; serpentina serpentina.";
Environ. Health Perspect. 110:269-275(2002).

EMBL; AF541917; AAN04908.1; -; mRNA.

HSSP; Q16019; IIYT.

G0; G0:0016021; C:integral to membrane; IEA.

GO; G0:0015488; F:binding; IEA.

InterPro; IPR001255; Beta-APP.

InterPro; IPR001255; Beta-APP.
                                                                                                                        Ensembl; ENSGALGO0000015770; Gallus ga
GO; GO:0016021; C:integral to membrans
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; BeTa-APP.
Pfam; PF03179; A4 EXTRA; 1.
Pfam; PF03494; BeTa-APP; 1.
                                               PRINTS; PRO0203; AMYLOIDA4.
PRINTS; PRO0204; BETTAAMYLOID.
PROSITE; PRO0319; A4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
NON TER
1 1
SEQUENCE 534 AA; 60597 MW;
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PROSITE;
NON_TER
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Barnes N.Y., Li L., Yoshikawa K.,
Milligan C.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                   Amyloid protein (Fragment). Gallus gallus (Chicken).
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                                                                                                                                                                                                                          HSSP; Q16019; 1IYT.
SMR; 093296; 224-333.
                                                                                                                                                                                                                                                  "Increased production of amyloid precursor protein substrate for caspase-3 in dying motoneurons."; J. Neurosci. 18:5869-5880(1998). EMBL; AF042098; AAC25052.1; -; mENA.
                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pfam; PF03494; Beta-APP; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
PROSITE; PS00320; A4 INTRA; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=134619;
                                                                                                                                                                                                                                                                                                                                                                                            Archosauria;
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Weognathae; Galliformes; Phasianidae; Phasiani
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Last sequence update)
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 Score 162; I
Pred. No. 2.3
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Pred. No. 4.2e-16;
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ion of members
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 DB 2;
2.3e-15;
3e 0;
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                                                 CRC64;
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                       Length
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turtle, Chelydra
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C TISSUE-Brain;
C TISSUE-Brain;
Coulson E.J., Paliga K., Beyreuther K., Masters C.L.;
A Coulson E.J., Paliga K., Beyreuther K., Masters C.L.;
Thelis us about its function.";
L Neurochem. Int. 0.0-0(2000).
I Neurochem. Int. 0.0-0(2000).
I Neurochem. Int. 0.0-0(2000).
I Neurochem. Int. 0.0-0(2000).
I NESSP, Q16019; IIYT.
R EMBL; AF030341; AAF12698.1; -; mRNA.
R SMR; Q9PVL1; 1-64, 260-369.
R Ensembl; ENSGALG0000015770; Gallus gallus.
R G0; G0:0016021; C:integral to membrane; IEA.
R G0; G0:0016021; C:integral to membrane; IEA.
R G0; G0:0016021; C:integral to membrane; IEA.
R G0; G0:0005488; F:binding; IEA.
R InterPro; IPR008155; A4 APP.
R InterPro; IPR008155; A4 Extra.
R InterPro; IPR008155; Beta-APP.
R InterPro; IPR001555; Beta-APP.
R InterPro; IPR001555; Beta-APP.
R Pfam; PF02177; A4 Extra.
R Pfam; PF02177; A4 Extra.
R PFRNTS; PR00203; AMYLOIDA4.
R PRINTS; PR00203; AMYLOIDA4.
R PRINTS; PR00203; AMYLOIDA6.
R PROSITE; PS00319; A4 Extra.
R PROSITE; PS00319; A4 EXTRA; 1.
                                                                                                                                                                                                                                                                                 77 PONPY
77 PONPY
Q5R477 PONPY PRELIMINARY; PRT; 695 AA.
Q5R477;
Q5R477;
01-FEB-2005 (TrEMBLrel. 29, Created)
01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
N1-FEB-2005 (TrEMBLrel. 29, Last annotation update)
Hypothetical protein DKFZp459D212.
Name=DKFZp459D212;
Pongo Pygmaeus (Orangutan).
Pongo Pygmaeus (Orangutan).
Pongo Pygmaeus (Orangutan).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LT 12
L1 CHICK
09PVL1;
09PVL1;
TISSUE-Cortex;
The German cDNA Consortium;
Wambutt R., Heubner D., Mewes
                                                                                                                                                                                 Pongo.
NCBI_TaxID=9600;
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Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; (
Archosauria; Aves; Neognathae;
Gallus.
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                                                                                                                                                    NUCLEOTIDE SEQUENCE.
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                                 H.W.,
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InterPro; IPRO08154; A4_extra.
InterPro; IPRO01255; Beta-APP.
InterPro; IPRO12252; Cytochrome-IPRO12257; A4_EXTRA; 1.
Pfam; PPO3494; Beta-APP; 1.
Pfam; PPO3494; Beta-APP; 1.
PRINTS; PRO0203; ANYLOIDA4.
PRINTS; PRO0203; ANYLOIDA4.
PRINTS; PRO0204; BETA-ANYLOID.
SMART; SM00006; A4_EXTRA; 1.
PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
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Q6RH29;
05-JUL-2004
05-JUL-2004
05-JUL-2004
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Name=beta APP;
Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Laurasiatl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9615;
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CANFA
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                                                                                                                                               ch 100.0%; l Similarity 100.0%; 30; Conservative 0;
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                            1 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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Conservative
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NUCLEOTIDE SEQUENCE.

NAKATA M.;

NAKATA M.;

NAKATA M.;

NAKATA M.;

NAMEL; AY498707; AAR97727.1; -; mRNA.

REMBL; AY498707; AAR97727.1; -; mRNA.

RESP; Q16019; 1BAA.

RESP; Q16019; Cintegral to membrane; IEA.

RO; GO:0016021; Cintegral to membrane; IEA.

RO; GO:0016021; Fibinding; IEA.

InterPro; IPR00155; A4_PP.

InterPro; IPR008155; A4_PP.

INTERPRO; IPR008154; A4_EXTRA.

INTERPRO; IPR001255; Beta-APP.

RINTS; PR0177; A4_EXTRA.

REINTS; PR00204; BETAMAYLOJD.

REINTS; PR00204; BETAMAYLOJD.

REINTS; RR00206; A4_EXTRA; 1.

PROSITE; PS00319; A4_EXTRA; 1.

PROSITE; PS003219; A4_EXTRA; 1.

RROSITE; PS003219; A4_EXTRA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fobo G., Han M., Wiemann S.;
Submitted (NOV-2004) to the EMBL/GenBank/DDBJ
EMBL; CR861380; CAH93439.1; -; mRNA.
SMR; O5R477; 28-123, 124-189, 385-494.
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005488; Fibinding; IEA.
GO; GO:000378; Fibeme binding; IEA.
GO; GO:0006118; Pielectron transport; IEA.
GO; GO:0006118; Pielectron transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TrEMBLrel. 27, Created)
(TrEMBLrel. 27, Last sequence update)
(TREMBLrel. 27, Last amotation update)
protein isoform APP695.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chordata; Craniata; Vertebrata; Euteleostomi; Laurasiatheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 162; DB 2;
100.0%; Pred. No. 3.1e-15;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytochrome_c_R.
                                 Score 162; DB 2;
Pred. No. 3.1e-15;
; Mismatches 0;
                                                                                                                    718CA42A9F9E6C10 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0BF5DD9BA2213E49
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                                                                         Length 695;
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                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 626

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RESULT 16
Q9DGJ8_CHICK F
ID Q9DGJ8_CHICK F
AC Q9DGJ8;
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                                                                                                                                                                                                                                                                        SQUERRE DE RESERVATOR DE LA COMPANIA DEL COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DEL C
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Best Loc
Matches
                                                                                            Matches
                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                              PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
PROSITE; PS00319; Ä4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
SEQUENCE 695 AA; 78565 MW; I
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K3 CANFA

Q56JK3 CANFA 1

Q56JK3;
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Ensembl; ENSCALGO000015770; Gallus gallus.
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008155; A4 = extra.
InterPro; IPR008154; A4 = extra.
InterPro; IPR001255; Beta-APP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001 (TrEMBLrel. 16, 01-MAR-2001 (TrEMBLrel. 16, 01-MAR-2004 (TrEMBLrel. 26, 01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE.

Gallego C., Sanchez-Diaz R., Sarasa L., Sarasa M.;

"Relationship between canine dementia and Alzheimer's disease.";

Submitted (FEB-2005) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beta-amyloid protein 695.
Canis familiaris (Dog).
Eukaryota; Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sarasa M., Rodolosse A., Sorribas V.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AF289218; AAG00593.1; -; mRNA.
HSSP; Q16019; 11YT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE SEQUENCE.
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Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pfam; PF02177; A4_EXTRA; 1.
Pfam; PF03494; Beta-APP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=9031;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
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NCE 695 AA; 78748 MW; 5A253
                                                                                        30;
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                                                                                                                                 Similarity
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    DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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                                                                                   100.0%; !
|larity 100.0%; !
|Conservative 0;
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llarity 100.0%;
Conservative (
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Last annotation update)
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                                                                                        Score 162; DB 2;
Pred. No. 3.1e-15;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 162; DB 2;
Pred. No. 3.1e-15;
; Mismatches 0;
                                                                                                                                                                                                                                                                        F201ED02AEC86D95 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5A253E0DB677875A CRC64;
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annotation update)
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    RESULT 19
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Q56JK4

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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            I 18
C2 STECO
Q56JK2_
                                                                                                                                               "The molecular machinery of Alzheimer's disease in the dolphin."
submitted (FEB-2005) to the EMBL/GenBank/DDBJ databases.
-!-SIMILARITY: Contains 1 BPTJ/Kunitz inhibitor domain.
EMBL; AY926583; AAX81912.1; -; mRNA.
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005488; F:binding; IEA.
GO; GO:0003037; F:heme binding; IEA.
GO; GO:0004667; F:serine-type endopeptidase inhibitor activity;
GO; GO:0006118; P:electron transport; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                  10-MAY 2005 (TrEMBLrel. 30, Created)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
Beta-amyloid protein 749.
Stenella coeruleoalba (Striped dolphin).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Cetacea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gallego C., Sanchez-Diaz R., Sarasa L., Sarasa M.; Relationship between canine dementia and Alzheimer's di Submitted (FEB-2005) to the EMBL/GenBank/DDBJ databases. EMBL; AY926581; AAX81910.1; -; mENA.
SEQUENCE 714 AA; 80826 MW; 50DDE51FB9E90EC5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q56JK4_CANFA
Q56JK4;
                                                                                                                                                                                                                                                                                                            Gallego
                                                                                                                                                                                                                                                                                                                                                                                     Odontoceti;
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Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canis familiaris (Dog).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-MAY-2005 (TrEMBLrel. 30, 10-MAY-2005 (TrEMBLrel. 30, 10-MAY-2005 (TrEMBLrel. 30, Beta-amyloid protein 714.
                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9737;
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                                                                 30;
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                                                                                   Similarity
                                DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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Last annotation updat
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                                                                                 Score 162;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 162; DB 2
Pred. No. 3.2e-1
                                                                                                                                    426599887C2A95D6 CRC64;
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PRT;

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AC 095241, 399 (Sail 37, Graeted)
Til-DBC.1958 (Sail 48, Last sequence update)
Til-DBC.1958 (Sail 48, Last sequence update)
Til-DBC.1958 (Sail 48, Last sequence update)
Til-DBC.2958 (Sail 48, Last sequence update)
The DBC.1958 (Sail 48, Last sequence update)
The DBC.1958 (Sail 48, Last sequence update)
The DBC.2958 (Sail 48, Last sequ
           EMBL; S81024; AAD14347.1; -; mRNA.

PDB; 11W6; X.-ray; A=346-551.

SMR; 095241; 28-123; 124-189, 287-342.

InterPro; IPR008155; A4_APP.

InterPro; IPR008155; A4_APP.

InterPro; IPR001255; Beta-APP.

INTERPRO; IPR001253; Prot_inh Kunz-m.
PANTHER; PTH10083:556; Beta-APP; 5.

Pfam; PP02177; A4_EXTRA; 1.

Pfam; PP03494; Beta-APP; 1.

Pfam; PP03494; Beta-APP; 1.

Pfam; PR00104; Kunitz_BPTi; 1.

PRINTS; PR00203; AMYLOIDA4.

PRINTS; PR00204; BETAAWYLOID.

PRODOm; PD00022; Prot_Inh Kunz-m; 1.
SMART; SM00016; A4_EXTRA; 1.

PROSITE; PS00320; A4_EXTRA; 1.

PROSITE; PS00319; A4_EXTRA; 1.

PROSITE; PS00320; A4_INTRA; 1.

PROSITE; PS00320; BPTI_KUNITZ_2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=Arroys;
IsoId=O95241-2; Sequence=Not described;
IsoId=O95241-2; Sequence=Not described;
IsoId=O95241-2; Sequence=Not described;
Is require
sorting of membrane proteins to the basolateral surface
sorting of membrane proteins to the basolateral surface
epithelial calls (By similarity).
In DOMAIN: The NPXY sequence motif found in many tyrosine-
chosnorvlated proteins is required for the specific bit
shown in the specific bit.
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Name=APP695;
                                                                                                                                                                                                                                                                                                                                                                   Swiss-Prot entry is copyright. It is produced een the Swiss Institute of Bioinformatics and European Bioinformatics Institute. There are a as long as its content is in no way modified as
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Q6GSC0 HUMAN
ID Q6GSC0 H
AC Q6GSC0 T
DT 05-JUL-2
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DT 05-JUL-2
DT 05-JUL-2
DE Amyloid
GN Name=App
OS Homo sap
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Matches 30
                                               Q6GSC0_HUMAN |
Q6GSC0;
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METAL
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                               Amyloid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Transmembrane;
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nilarity 100.0%;
Conservative 0
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                            A4 protein,,
                                                                                                              PRELIMINARY;
   (Human)
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260
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147
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665
                                 isoform b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copper (By similarity).
Copper (By similarity).
Copper (By similarity).
Copper (By similarity).
Copper or zinc (By similarity).
Required for Cu(2+) reduction (B
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Zinc-binding (By similarity).
Heparin-binding (By similarity).
Heparin-binding (By similarity).
Collagen-binding (By similarity).
Interaction with G(o)-alpha (By similarity).
                                                  Last
Last
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Gamma-CTF(50) (I
C31 (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                         similarity)
Reactive bo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NPXY motif.
Asp/Glu-rich
Poly-Thr.
                                                                                                                                                                                                                                                                                                                      similarity).
Implicated in free
(By similarity).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytoplasmic (Potential). BPTI/Kunitz inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beta-amyloid protein
Beta-amyloid protein
C83 (Potential).
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Soluble APP-alpha (Potential).
Soluble APP-beta (Potential).
C99 (Potential).
                                                                                                                                                                                                                                                       Score 162; DB 1;
Pred. No. 3.4e-15;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                         Cleavage (by caspase-6) (By s
Cleavage (by alpha-secretase)
                                                                                                                                                                                                                                                                                                                                                                                                         Cleavage (h
similarity)
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Gamma-CTF(59) (Pote
                                               sequence u
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(Potential)
(Potential)
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RESULT Q6RH28 ID Q6

IT 21 28 CANFA QGRH28_CANFA PRELIMINARY;

PRT;

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R RROSITE; PS00319; A4 EXTRA; 1.

R PROSITE; PS00320; A4 INTRA; 1.

DR PROSITE; PS00320; BPTI KUNITZ 1; 1.

DR PROSITE; PS00279; BPTI KUNITZ 2; 1.

DR PROSITE; PS50279; BPTI KUNITZ 2; 1.

CP970ENCE 751 AA; 84819 MW; C987C557C5A3714E CR(
                                                                                                                                                       RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altcchul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altcchul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altcchul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Wedin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Bosak S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Vilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Wadan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Wadan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Whiting M., Wadan A., Koren E.D., Dickson M.C.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                          Query Ma
Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I- SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.

EMBL; BC065529; AAH65529.1; -; mRNA.

SMR; Q66SC0; 28-123, 124-189, 287-342, 441-550.

Ensembl; ENSG00000142192; Homo sapiens.

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0005488; F:binding; IEA.

GO; GO:00037; F:heme binding; IEA.

GO; GO:0004667; F:serine-type endopeptidase inhibitor activity; IEA.

GO; GO:0006118; P:electron transport; IEA.
                                                                                                                                                                                                                                                      PRINTS; PR00203; AMYLÕIDA4.
PRINTS; PR00759; BASICTASE.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
SMART; SM00131; KU; 1.
                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; Beta-APP.
InterPro; IPR012282; Cytochrome c.R.
InterPro; IPR002223; Prot inh_Kunz-m.
Pfam; PF02177; A4 EXTRA; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (JAN-2
                                                                                                                                                                                                                                                                                                                                                          Pfam; PF03494; BeTa-APP; 1.
Pfam; PF00014; Kunitz_BPTI; 1.
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Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
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                                                                            30;
                    DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (JAN-2004) to
                                                                          100.0%;
llarity 100.0%;
Conservative 0
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                                                                        Score 162; D
Pred. No. 3.4
); Mismatches
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d. No. 3.4e-15;
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GN Namesbeta APP;

OS Canis familiaris (DOg).

CC Canis familiaris (Dog).

CC Mammalis butheria; Laurasiatheria; Craniata; Vertebrata; Euteleostomi;

CC Canis.

OX NCBI_TaxID=9615;

RN NCLEOTIDE SEQUENCE.

RA Nakata M.;

RA Nakata M.;

CC -[- SIMILARITY; Contains 1 BPTJ/Kunitz inhibitor domain.

CC CEMBL; Av498708; AAR97728.1; -; mRNA.

CC CEMBL; Av498708; AAR97728.1; -; mRNA.

CR MBL; Av498708; AAR97728.1; -; mRNA.

CR GO; GO:0016021; C:integral to membrane; IEA.

CR GO; GO:0016021; C:integral to membrane; IEA.

CR GO; GO:0014867; F:serine-type endopeptidase inhibitor activity; IEA.

CR GO; GO:001625; AA_EXTRA; 1.

CR FAINTS; FR00123; AMYLGIDA4.

CR FAINTS; FR00223; AMYLGIDA4.

CR FAINTS; FR00223; AMYLGIDA4.

CR FAINTS; FR00203; AMYLGIDA4.

CR FAINTS; 
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TIO-MAY-2005 (TrEMBLrel. 30, Created)
TIO-MAY-2005 (TrEMBLrel. 30, Last sequence update)
TIO-MAY-2005 (TrEMBLrel. 30, Last sequence update)
TIO-MAY-2005 (TrEMBLrel. 30, Last annotation update)
TIO-MAY-2005 (TrEMBLrel. 751.

Canis familiaris (Dog).
CCANIS EURACYOCTA (Consider)
CCANIS EURACYOCTA (CANIS)
CCANIS EURACYOCTA (CANIS
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1 Similarity 100.0%; I
30; Conservative 0;
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4 (TrEMBLrel. 27, L
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1 (TremBLrel. 27, L
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Pred. No. 3.4e-15;
; Mismatches 0;
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annotation
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NUCLEOTIDE SEQUENCE.

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T 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
T 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
T 13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
T 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
T 13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
E brain cDNA, clone: QfilA-13524, similar to human amyloid k
E protein (protease nexin-II,Alzheimer disease) (APP), tran
E variant 2; variants (Crab eating macaque) (Cynomolgus mor
E Macacca fascicularis (Crab eating macaque) (Cynomolgus mor
E Wacaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutel
C Mammalia; Eutheria; E warchontoglires; Primates; Catarrhir
C Cercopithecidae; Cercopithecinae; Macaca.
N (TII TaxID-9541;
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GO; GO:004867; F:serine-type endopept
GO; GO:0006118; P:sectron transport;
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4-extra.
InterPro; IPR001255; Beta-APP.
InterPro; IPR0012582; Cytochrome C.R.
InterPro; IPR001282; Cytochrome C.R.
InterPro; IPR001282; Cytochrome C.R.
InterPro; IPR001282; Cytochrome C.R.
InterPro; IPR001282; Prot inh_Kunz-m.
Pfam; PF00114; A4 EXTRA; I.
Pfam; PF00114; Kunitz BPTI; 1.
PRINTS; PR00103; AMYLOIDA4.
PRINTS; PR00104; BETAAMYLOID.
SMART; SM00101; KUn; II.
SMART; SM00101; KU; I.
SMART; SM00101; KU; I.
SMART; SM00101; KU; I.
SMART; PS00320; A4 INTA; I.
PROSITE; PS00320; BTI KUNITZ 2; I.
SEQUENCE 751 AA; 84920 MW; C1CD20:
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Q4R4R8 )
Q4R4R8;
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"DNA sequences of macaque
evolutionary implications.
Submitted (JUN-2005) to th
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1 Similarity 100.0%;
30; Conservative 0;
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e genes expressed
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Pred. No. 3.4e-15;
Mismatches 0;
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(APP), tra
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Catarrhini;
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RESULT 25
A4_CAVPO
ID A4_CA
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Q9DGJ7_
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Best Local
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PROSITE; PS00319; /
PROSITE; PS00320; /
PROSITE; PS00280; /
PROSITE; PS50279; /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OpDGJ7;
                                                                                                                                                                                                                                                                                                                Ensembl; ENSGALGO0000015770; Gallus gallus.
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005488; F:binding; IEA.
GO; GO:0005486; F:serine-type endopeptidase inhibitor activity;
InterPro; IPR008155; A4 APP.
InterPro; IPR008155; A4 APP.
InterPro; IPR008125; BeTa-APP.
InterPro; IPR008223; Prot inh Kunz-m.
A4_CAVPO
                                                                                                                                                                 PROSITE;
                                                                                                                                                                                                             PRINTS; PR00203; AMYLŌIDA4.
PRINTS; PR00759; BASTCPTASE.
PRINTS; PR00204; BETAAMYLOID.
PRODOM; PD000222; Prot Inh Kunz-m;
SMART; SM00006; A4 EXTRA; I.
SMART; SM00131; KU; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUCLECTION DEFINITION. RODGIOSSE A., Sorribas V.;
Sarasa M., RodGiosse A., Sorribas V.;
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beta-amyloid protein 751 isoform.
Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Cra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2001 (TrEMBLrel 16, Created)
01-MAR-2001 (TrEMBLrel 16, Last sequence update)
01-MAR-2004 (TrEMBLrel 26, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protease.
SEQUENCE
                                                                                                                                                                                                                                                                                   Pfam; PF02177; A4_EXTRA; 1.
Pfam; PF03494; Beta-APP; 1.
Pfam; PF00014; Kunitz_BPTI; 1.
                                                                                                                                                                                       PROSITE; PS00319; PROSITE; PS00320;
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SMR; Q9DGJ7; 28-123, 124-189, 287-342,
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EMBL; AF289219; AAG00594.1; -; mRNA.
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                                                                        DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                  PS50279;
                                                                                                                                                                             PS00280;
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                                                           DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE.
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                                                                                                                                                           BPTI_KUNITZ_1;
BPTI_KUNITZ_2;
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; A4_INTRA; 1.
; BPTI_KUNITZ_1; :
; BPTI_KUNITZ_2; :
                                                                                                                                                                                        A4_EXTRA; 1.
A4_INTRA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neognathae;
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Neognathae; Galliformes; Phasianidae; Phasiani
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Pred. No. 3.4e-15;
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Pred. No. 3.4e-15;
Mismatches 0;
  PRT;
                                                                                                                                                       E78E9413A8033D84 CRC64;
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neurite growth, neuronal adhesion and axonogenesis. Involved in cell mobility and transcription regulation through protein-protein interactions (By similarity). Can promote transcription activation through binding to AppBl/Tip60 and inhibit Notch signaling through interaction with Numb (By similarity). Couples to apoptosis-inducing pathways such as those mediated by G(0) and JIP (By similarity). Inhibits G(0) alpha ATPase activity (By similarity). Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presenilin I (By similarity). May be involved in copper homeostasis/oxidative stress through copper ion reduction (By similarity). In vitro, copper-metallated APP induces neuronal death directly or is potentiated through Cu(2+)-mediated low-density lipoprotein oxidation (By similarity). Can regulate neurite outgrowth through binding to components of the extracellular matrix such as heparin and collagen I and IV (By similarity). The splice isoforms that contain the BPTI domain possess protease inhibitor activity (By similarity).

-i-FUNCTION: Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as copper, zinc and iron. Beta-amyloid psptides bind to lipoproteins and apoliproteins E and J in the CSF and to HDL particles in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-OCT-2003 (Rel. 42, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
13-SEP-2005 (Rel. 48, Last annotation update)
Amyloid beta A4 protein precursor (APP) (ABPP) (Alzheimer's disease amyloid protein homolog) [Contains: Soluble APP-alpha (S-APP-alpha);
Soluble APP-beta (S-APP-beta); CTF-alpha; CTF-beta; Beta-amyloid protein 40 (Beta-APP40); Beta-amyloid protein 40 (Beta-APP40); P3(42);
P3(40); Gamma-CTF(59) (Gamma-secretase C-terminal fragment 59); Gamma-CTF(57) (Gamma-secretase C-terminal fragment 57);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Martel C.L., Mackic J.B., Matsubara E., Governale S., Miguel Miao W., McComb J.G., Frangione B., Ghiso J., Zlokovic B.V.; "Isoform-specific effects of spolipoproteins E2, E3, and E4 cerebral capillary sequestration and blood-brain barrier trancirculating Alzheimer's amyloid beta."; J. Neurochem. 69:1995-2004(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=20576391; PubMed=11035007; DOI=10.1074/jbc.M005968200; Pinnix I., Musunuru U., Tun H., Sridharan A., Golde T., Eckman C., Ziani-Cherif C., Onstead L., Sambamurti K.; Ziani-Cherif C., Onstead L., Sambamurti K.; The putative "A novel gamma -secretase assay based on detection of the putative
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and amyloidogenic
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Mammalia; Eutheria; Euarchontoglires;
Hystricognathi; Caviidae; Cavia.
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10-OCT-2003 (Rel. 42,
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FUNCTION: Functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant
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oglires; Glires; Rodentia;
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plasma inhibiting matal-cately and oxidation of ipoproteins.

PRINCIPION implicating matalia and may regulate neurite outgrowth in the brain [59 similarity).

PRINCIPION: The gamma-CTP peptides as well as the caspase-cleaved peptides; including clt, are potent enhancers of neuronal application including clt, are potent enhancers of neuronal peptides; including clt, are potent enhancers of neuronal peptides; including clt, are potent enhancers of neuronal peptides; including clt, are potent enhancers of neuronal periods. A family, mapped periods and path (may similarity). Also interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts with GCC-like protein sph. peril. Appel, lil. RNS2 interacts and lil. RNS2 interacts and lil. RNS2 interacts lil. RNS2 i
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NK SMR; Q60495; 28-123, 124-189, 287-342, 460-569.

R InterPro; IPR008155; A4_APP.

R InterPro; IPR008155; BeTa-APP.

R InterPro; IPR001255; BeTa-APP.

R FARMER; FYRH10083:SF6; BeTa-APP.

R PANTHER; FYRH10083:SF6; BeTa-APP.

R Pfam; PF02177; A4_EXTRA; 1.

R Pfam; PF00014; Kunitz_BPTI; 1.

R PRINTS; PR00204; BETAAMYLOID.

R PRINTS; PR00204; BETAAMYLOID.

R PRINTS; PR002027; PRCL_Inh Kunz-m; 1.

SMART; SM001012; KU; 1.

R PROSITE; PS00319; A4_EXTRA; 1.

R PROSITE; PS00319; A4_EXTRA; 1.

R PROSITE; PS00320; A4_INTRA; 1.

R PROSITE; PS00320; BTI KUNITZ_1; 1.

R PROSITE; PS00320; BTI KUNITZ_1; 1.

R PROSITE; PS00320; BTI KUNITZ_1; 1.

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R PROSITE; PS00320; BTI KUNITZ_2;
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SIGNAL 1
CHAIN 18
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A4 HUMAN STANDARD; PRT; 770 AA.

P05067; P09000; P78438; Q13764; Q1376; Q1379; Q16011; Q160
Q16019; Q16020; Q9BT38; Q9UCX9; Q9UCX8; Q9UCC1; Q9UQ
13-AUG-1987 (Rel. 05, Created)
01-NOV-1991 (Rel. 20, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Amyloid beta A4 protein precursor (APP) (ABPP) (Alzheimer's
Amyloid protein) (Cerebral vascular amyloid peptide) (CVAP)
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CAA67589.1; -;
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Amyloid beta A4 protein.

Soluble APP-alpha (By similarity).

Soluble APP-beta (By similarity).

CTF-alpha (By similarity).

Beta-amyloid protein 42 (By simila:
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Pred. No. 3.5e-15;
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Grzeschik K.-H., Multhaup G., B
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Salto M., Tsukuni S., Sakaki Y.;
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Nucleic
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MEDILINE=89128427; PubMed=2783775;

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"The PreA4 (695) precursor protein of Alzheimer's encoded by 16 exons.";
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Nature 331:525-527(1988)
[3]
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                                                                                                                                         NUCLEOTIDE SEQUENCE (ISOFORM APP770).
MEDLINE=97263807; PubMed=9108164; DOI=10.1093/nar/25.9.1802
Hattori M., Tsukahara Furuhata Y., Tanahashi H., Hirose
                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE (ISOFORM L-APP733). TISSUE=Leukocyte;
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Gene 102:291-292(1991).
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MEDLINE=90236318; PubMed=2110105; DDI=10.1016/0378-1119(90)90310-N;
YOShikai S.-I., Sasaki H., Doh-ura K., Furuya H., Sakaki Y.;
"Genomic organization of the human amyloid beta-protein precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=88122639; PubMed=2893289; DOI=10.1038/331525a0; Ponte P., Gonzalez-Dewhitt P., Schilling J., Miller J., He Greenberg B., Davis K., Wallace W., Lieberburg I., Fuller
                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=92268136;
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Name=APP; Synonyms=A4, AD1;
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B., Davis K., Wal
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SEQUENCE (ISOFORM APP639)
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Sasaki H., Doh-ura K., Furuya H.,
                                                                                                                                                                                                                                                                                                                                                                                    PubMed=1587857;
na U., Czech C.,
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beck A., Salbaum J.M., Masters C.L.,
Beyreuther K., Mueller-Hill B.;
disease amyloid A4 protein resemble
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Klausner R.D., Collins F.S., Wagner L., Schemmen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

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A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.

A Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.

Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Pahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.

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Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

"Generation and initial analysis of more than 15,000 full-length hur
                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=LIVEL,

MEDLINE=8901647; PubMeg=J-
Schon E.A., Mita S., Sadlock J., Herbe
Schon E.A., Mita S., to sallock J., Herbe
"A cDNA specifying the human amyloid b
encodes a 95-kba polypeptide.";
encodes a 95-kba polypeptide.";
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Schon E.A
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MEDLINE=22744650; PubMed=12859342;
DOI=10.1046/j.1460-9568.2003.02731.x;
DOI=10.1046/j.1460-9568.2003.02731.x;
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Livingston R.J., Rieder M.J., Rajkumar N., Downing T.K., Olson A.N.,
Livingston R.J., Rieder M.J., Rajkumar N., Downing T.K., Olson A.N.,
Nguyen C.P., Gildersleeve H., Cassidy C.M., Johnson E.J.,
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NIEHS-SNPs, environmental genome project, NIEHS ES15478, Department
of Genome Sciences, Seattle, WA (URL: http://egp.gs.washington.edu).";
Submitted (FEB-2005) to the EMBL/GenBank/DDBJ databases.
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MEDLINE=22388257;
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                                                                 MEDLINE=22608298;
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Lahiri D.K., Salton
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s. 16:11402-11402(1988)
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                                                                 PubMed=12665801;
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Feingold E.A., Grouse L.H., Derge J
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p53601; 060HH7; 095KN7;

01-OCT-1996 (Rel. 34, Created)

28-FEB-2003 (Rel. 41, Last sequence update)

13-SEP-2005 (Rel. 48, Last sequence update)

13-SEP-2005 (Rel. 48, Last annotation update)

13-SEP-2005 (Rel. 48, Last annotation update)

Amyloid beta A4 protein precursor (APP) (ABPP) (Alzheimer's disease amyloid protein homolog) [Contains: Soluble APP-alpha (S-APP-alpha);

Soluble APP-beta (S-APP-beta); C99; Beta-amyloid protein 42 (Beta-APP42);

Beta-amyloid protein 40 (Beta-APP40); C83; P3(42); P3(40);

Gamma-CTF(59) [Gamma-secretase C-terminal fragment 59); Gamma-CTF(57)

(Gamma-secretase C-terminal fragment 59); Gamma-CTF(57)

Secretase C-terminal fragment 50); C31].

Name-APP; ORFNames=CocE-15949;

Macaca fascicularis (Crab seting macaque) (Cynomolgus monkey).

Particularis (Crab seting macaque) (Cynomolgus monkey)
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TISSUE-Brain;
MEDIXINE-87231971; PubMed=3035574;
MEDIXINE-87231971; PubMed=3035574;
MEDIXINE-87231971; PubMed=3035574;
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secreted protein.";
Science 245:651-653(1989).
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TISSUE-Brain cortex;
MEDLINE-88124954; PubMed=2893379;
Zain S.B., Salim M., Chou W.G., S
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MEDLINE=88122641; PubMed=2893291; DOI=10.1038/331530a0;

Kitaguchi N., Takahashi Y., Tokushima Y., Shiojiri S., Ito H.;

"Novel precursor of Alzheimer's disease amyloid protein shows |

inhibitory activity.";
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tes 30; Conservative 0
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Pred. No. 3.5e-15;
Mismatches 0;
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  e) (Cynomolgus monkey).Vertebrata; Euteleostomi;
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.271.3.1613;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       precursor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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    -i-FUNCTION: Functions as cell surface receptor and performs physiological functions on the surface of neurons relevant to neurite growth, neuronal adhesion and axonogenesis. Involved in cell mobility and transcription regulation through protein-protein interactions (by similarity). Can promote transcription activation through binding to APBHJ/Tip60 and inhibit which signaling through interaction with Numb (By similarity). Complete transcription activation through binding to APBHJ/Tip60 and inhibit Norch signaling through interaction with Numb (By similarity). May be involved in copper homeostasis/oxidative stress through copper for beets secretase and presentiin 1 (By similarity). May be involved in copper homeostasis/oxidative stress through copper ion reduction. In vitro, copper-metallated App induces neuronal tendential through binding to components of the extracellular matrix such as heparin and collagen I and IV (By similarity). The splice isoforms that contain the BPII domain possess protease inhibitor activity (By similarity). Can regulate extracellular matrix such as heparin and collagen I and IV (By similarity). The splice isoforms that contain the BPII domain possess protease inhibitor activity (By similarity). Can regulate such as copper, zinc and iron (By similarity). By similarity). The splice isoforms that cransient metals such as copper, zinc and iron (By similarity). By similarity). The possess (By similarity). Bind (By similarity). The possess (By similarity). Bind (By similarity). The populasmic proteins, including APBB family members, the APBA family markets with microtubules in the presence of ATP similarity). Associates with microtubules in the presence of ATP similarity. APBPI (By similarity). ANASCE (Via as Kinda MAPF via the MT-binding domains (By similarity). ANASCE (Via Bass) and DDB1. In vitro, it binds MAPF via the MT-binding domains (By similarity). ANASCE (Via Bass) and DDB1. In the presence of ATP similarity and surface surface lutar replicate surface. Some APP accumulates in ter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NÜCLEOTIDE SEQUENCE (ISOFORMS APP695 AN TISSUE-Cerebellum; PubMed=1905108; MEDLINE=91273117; PubMed=1905108; Podlismy M.B., Tolan D.R., Selkoe D.J.; Podlismy M.B., Tolan D.R., Detcein perportes a primate model for beta amyloid especies."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (OCT-2003) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kusuda J., Osada N., Tanuma R., Hirata M., Sugano S., "Isolation and characterization of cDNA for macaque no disease genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cercopithecidae;
NCBI_TaxID=9541;
[1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              - ! -
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                                            IsoId=P53601-2;
                                                                                    IsoId=P53601-1;
    IsoId=P53601-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pathol. 138:1423-1435(1991).
Sequence=VSP_013360,
                                       Sequence=VSP_000010,
                                                                                       Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ., Selkoe ....
beta protein precursor in monkey and human
for beta amyloidosis in Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AND
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  VSP_013361;
                                          VSP_000011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hashimoto K.;
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DOMAIN:

The basolateral sorting

signal (BaSS) is required the basolateral surface o

of.

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PRINTS; PR00204; BETAAMYLOID.
PRODOM; PR000222; PROT INh Kun
SMART; SM00006; A4 EXTRA; I.
SMART; SM00131; KU; 1.
PROSITE; PS00319; A4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
PROSITE; PS00280; BPTI KUNITZ
PROSITE; PS00280; BPTI KUNITZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M58726; AAA36828.1; -; mRNA.

EMBL; M58727; AAA36829.1; -; mRNA.

EMBL; AB152150; BAD51938.1; -; mRN

HSSP; P08592; LNMJ.

SMR; P53601; 28-123, 124-189, 287-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This Swiss-Prot entry is copyright. It is produced through a obstween the Swiss Institute of Bioinformatics and the EMBL the European Bioinformatics Institute. There are no restrict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PANTHER; PTHR10083:SF6; Beta-APP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRINTS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR001255;
InterPro; IPR002223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   proteins (By similarity).

MISCELLANEOUS: Chelation of metal ions, notably copper, iron and zinc, can induce histidine-bridging between beta-amyloid molecules resulting in beta-amyloid-metal aggregates (By similarity).

Extracellular zinc-binding increases binding of heparin to APP and inhibits collagen-binding (By similarity).

SIMILARITY: Belongs to the APP family.

SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        similarity). Cleaved by caspases during neuronal apoptosis (By similarity). Cleavage at Asp-739 by either caspase-3, -8 or -9 results in the production of the neurotoxic C31 peptide and the increased production of beta-amyloid peptides (By similarity). PTM: N- and O-glycosylated (By similarity) and PTM: Phosphorylation in the C-terminal on tyrosine, threonine and serine residues is neuron-specific. Phosphorylation can affect App processing, neuronal differentiation and interaction with other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PTM: Proteolytically processed under normal cellular conditions. Cleavage by alpha-secretase or alternatively by beta-secretase leads to generation and extracellular release of soluble APP peptides, S-APP-alpha and S-APP-beta, respectively, and the retention of corresponding membrane-anchored C-terminal fragments C83 and C99. Subsequent processing of C83 by gamma-secretase yields P3 peptides. This is the major secretory pathway and is nonamyloidogenic. Alternatively, presenilin/nicastrin-mediated gamma-secretase processing of C99 releases the amyloid beta proteins, amyloid-beta 40 (Abeta40) and amyloid-beta 42 (Abeta42) major components of amyloid plaques, and the cytotoxic C-terminal fragments, gamma-CTF(50), gamma-CTF(57) and gamma-CTF(59) (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphorylated proteins is required for the specif
the PID domain. However additional amino acids eit
terminal to the NPXY motif are often required for
interaction. The PID domain-containing proteins wh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sorting of membrane proteins to the basolateral surface epithelial cells (By similarity).

DOMAIN: The NPXY sequence motif found in many tyrosine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       residue.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PF03494; Beta-APP; 1.
PF00014; Kunitz_BPTI; 1.
S; PR00203; AMYLOIDA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF02177; A4_EXTRA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      long as its content is in no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          uire the YENPTY motif for full interaction. These interactions independent of phosphorylation on the terminal tyrosine idue. The NPXY site is also involved in clathrin-mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PR00759;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01; 28-123, 124-189, 287-342, IPR008155; A4_APP. IPR008154; A4_extra.
KU; 1.

19; A4_EXTRA; 1.

20; A4_INTRA; 1.

280; BPTI_KUNITZ_1; 1.

2779; BPTI_KUNITZ_2; 1.

splicing; Amyloid; Apoptosis; Cell adhesion; Coated pit splicing; Amyloid; Apoptosis; Cell adhesion; Coated pit splicing; Glycoprotein; Heparin-binding; Iron;
                                                                                                                                                                          splicing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BAD51938.1; -; mRNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beta-APP.
Prot_inh_Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                              Kunz-m;
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tions on its
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Best Local S
Matches 30
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10-MAY-2005 (Rel. 47, Last sequence update)
13-SEP-2005 (Rel. 48, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
13-SEP-2005 (Rel. 49, Last annotation update)
13-SEP-2005 (Rel. 49, Last annotation update)
13-SEP-2005 (Rel. 47, Last annotation update)
13-SEP-2005 (Rel. 47, Last annotation update)
13-SEP-2005 (Rel. 47, Last sequence update)
13-SEP-2005 (Rel. 47, Last
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Q5IS80;
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               NUCLEOTIDE SEQUENCE [MRNA]
PubMed=15620360; DOI=10.10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Metal-binding; Notch signaling pathway; Phosphorylation; Protease inhibitor; Proteoglycan; Serine protease inhibi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOTIF
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                                                                                    e=APV;
| troglodytes (Chimpanzee).
| troglodytes (Chimpanzee):
| בדיסלם; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Caryota; Metazoa; Chordata; Craniata; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                  672
                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  h 100.0%;
Similarity 100.0%;
30; Conservative (
520360; DOI=10.1016/j.cell.2004.11.040; Vallender E.J., Evans P.D., Anderson J
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Gamma-CTF (57)
Gamma-CTF (50)
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Basolateral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Heparin-binding (By similarity). Zinc-binding (By similarity). Heparin-binding (By similarity). Heparin-binding (By similarity). Collagen-binding (By similarity) Interaction with G(o)-alpha (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amyloid beta A4 protein.
Soluble APP-alpha (Potential)
Soluble APP-beta (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Asp/Glu-rich
Poly-Thr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytoplasmic (Potential).
BPTI/Kunitz inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beta-amyloid protein C83 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Extracellular
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C99 (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 162; DB 1;
Pred. No. 3.5e-15;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Potential
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er or zinc (By similarity).
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Anderson J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                    701
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(Potential).
(Potential).
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(By similarity).
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Gilbert S.L.,
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INVERTION, ENUCLEIONS as a notable surface receptor and personne cill mobility and transcription and accompanies. Involved in neutrite growth, neutronal adhesion and accompanies and present on cell mobility and transcription regulation through briefly completed in through binding to ApBBI/Tiple and inhibit Notch signaling through through binding to ApBBI/Tiple and inhibit Notch signaling through interaction with numb (By Bindiarty) accomplete on adoptions attracted in through binding to ApBBI/Tiple and inhibit Notch signaling through interaction with numb (By Bindiarty) accomplete on adoptions attracted in the provided in copper homeostasis/oxidative stress through copper setting the axial accompanies of the setting the axial transport of beta secretase and presentian (By Similarity). Acts as a kinesin I membrane receptor, mediating the axial transport of beta secretase and presentian (By Similarity). The pillod psycholes are lipophilic metal chalators which metal reducing a patentiate the limiting through through binding to the pillod secretary. The pillod psycholes are lipophilic metal chalators to the metal reducing a patentiate that the proposed secretary in the pillod psycholes are lipophilic metal chalators with metal reducing a patential p
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Cell 119:1027-1040(2004)
-!- FUNCTION: Functions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mahowald M., 
"Accelerated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wyckoff G.
evolution
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of nervous
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system genes
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           <del>-</del>
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apoptosis
, -8 or -9
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threonine and can affect APP n with other

to APP molecules

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EMBL; AV665248; AAV74286.1; -; mRNA.

RNA; OSIS80; 28-123, 124-189, 287-342, 460-569.

BR InterPro; IPR008155; A4_APP.

DR InterPro; IPR008155; Beta-APP.

DR InterPro; IPR001285; Beta-APP.

DR InterPro; IPR001285; Beta-APP.

DR InterPro; IPR001283; Prot inh Kunz-m.

PANTHER; PTHR10083:SF6; Beta-APP; 6.

Pfam; PF03194; Beta-APP; 1.

Pfam; PF03494; Beta-APP; 1.

Pfam; PF03494; Beta-APP; 1.

Pfam; PF03014; Kunitz BPTI; 1.

PFAM; PF00014; Kunitz BPTI; 1.

PR PRINTS; PR00203; AMYLOIDA4.

R PRINTS; PR00204; BETAAMYLOID.

PR PROMITS; PR000316; AA_EXTRA; 1.

DR PROSITE; PS000319; AA_EXTRA; 1.

DR SMART; SM00006; AA_EXTRA; 1.

DR PROSITE; PS00319; AA_EXTRA; 1.

DR PROSITE; PS00320; AA_INTRA; 1.

DR PROSITE; PS00280; BPTI_KUNITZ_1; 1.

PROSITE; PS00280; BPTI_KUNITZ_2; 1.

DR PROSITE; PS00280; BPTI_KUNITZ_3; 1.

PROSITE; PS00280; BPTI_KUNITZ_3; 1.

DR PROSITE; PS00280; BPTI_KUNITZ_3; 1.

DR PROSITE; PS00280; BPTI_KUNITZ_3; 1.

PROSITE; PS00280; BPTI_KUNITZ_3; 1.
       Proteoglycan;
SIGNAL
CHAIN
TANISMEM
TRANSMEM
REGION
Beta-amyloid protein 42 (Potential)
Beta-amyloid protein 40 (Potential)
C83 (Potential).
P3 (42) (Potential).
P3 (40) (Potential).
P3 (40) (Potential).
Gamma-CTP (59) (Potential).
Gamma-CTP (57) (Potential).
Gamma-CTP (50) (Potential).
C31 (Potential).
Extracellular (Potential).
Extracellular (Potential).
C31 (Potential).
Extracellular (Potential).
Potential.
Cytoplasmic (Potential).
Potential.
Cytoplasmic (Potential).
Potential (Potential).
Potential (Potential).
Cytoplasmic (Potential).
Potential (Potential).
Incolumnation (By similarity).
Heparin-binding (By similarity).
Heparin-binding (By similarity).
Heparin-binding (By similarity).
Interaction with G(o)-alpha (By)
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Amyloid beta A4 protein.
Soluble APP-alpha (Potential).
Soluble APP-beta (Potential).
C99 (Potential).
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40 (Potential).
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                                                                                                                                                                                                                                                              P79307; Q29023; Q9TUIO; O1.NOV-1997 (Rel. 35, Created)
01.NOV-1997 (Rel. 35, Created)
10-CCT-2003 (Rel. 42, Last sequence update)
11-SEP-2005 (Rel. 48, Last annotation update)
13-SEP-2005 (Rel. 48, Last annotation update)
Amyloid beta A4 protein precursor (APP) (ABP) (Alzheimer's disease amyloid protein homolog) [Contains: Soluble APP-alpha (S-APP-alpha); Soluble APP-beta (S-APP-beta); C99; Beta-amyloid protein 42 (Beta-APP40); Beta-amyloid protein 40 (Beta-APP40); C83; P3(42); P3(40); Gamma-CTF(59) [Gamma-eccretase C-terminal fragment 57); Gamma-CTF(50) (Gamma-EFF(57) [Gamma-CTF(50)]; Gamma-CTF(50); Gamma-CTF(50)]; Gamma-CTF(50); Gamma-CTF(50
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    Winteroe A.K., Fredholm
"Evaluation and characteristics"
library
                                                                                          NUCLEOTIDE SEQUENCE:
Kimura A., Takahashi T.;
"Amyloid precursor protein 770.";
submitted (SEP-1999) to the EMBL/
                                                                                                                                                                                                       Mammalia; Eutheria;
                                                                                                                                                                                                                                                    Name=APP
                                                                                                                                                                                                                                                                                                                                                                                                                                        A4_PIG
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                                                                                                                                                                                                                    Eukaryota; Metazoa;
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                                                                                                                                                                                                                                     scrofa (Pig).
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                                                             SEQUENCE [LARGE
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                                Fredholm M.;
                 characterization
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                                                               SCALE
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Copper (By similarity).
Copper (By similarity).
Copper (By similarity).
Copper or zinc (By similarity).
                                                                                            EMBL/GenBank/DDBJ databases
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Cleavage (b
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Cleavage (by gamma-secretase;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 162; DB 1;
Pred. No. 3.5e-15;
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                                                               MRNA]
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                 porcine
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                                                               1-136
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                   small intestine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (By similarity)
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MEDLINE=92017079; PubMed=1656157; DOI=10.1016/0169-328X(91)90088-F; Johnstone E.M., Chaney M.O., Norris F.H., Pascual R., Little S.P., "Conservation of the sequence of the Alzheimer's disease amyloid
                                                                                                                                                                                     Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases [3]
                                                                                                                                               SEQUENCE
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polymerase chain

dog, polar bear and

five other mammals

ş

cross-species

cell mobility and transcription regulation through protein-protein interactions (By similarity). Can promote transcription activation through binding to APBH/Tip60 and inhibit Notch signaling through interaction with Numb (By similarity). Couples to apoptosis-inducing pathways such as those mediated by G(O) and JIP (By similarity). Inhibits G(O) alpha ATPase activity (By similarity). Acts as a kinesin I membrane receptor, mediating the axonal transport of beta-secretase and presentin 1 (By similarity). May be involved in copper homeostasis/oxidative stress through copper ion reduction (By similarity). In vitro, copper-metallated APP induces neuronal death directly or is potentiated through Cu(2+)-mediated low-density lipoprotein oxidation (By similarity). Can regulate neurite outgrowth through binding to components of the extracellular matrix such as heparin and collagen I and IV (By in Res. Mol. Brain Res. 10:299-305(1991).
FUNCTION: Functions as a cell surface receptor and performs
physiological functions on the surface of neurons relevant similarity) neurite growth, neuronal adhesion and reaction analysis." axonogenesis. performs Involved 6

FUNCTION: Beta-amyloid peptides are lipophilic metal with metal-reducing activity. Bind transient metals copper, zinc and iron (By similarity).
FUNCTION: The gamma-CTF peptides as well as the casp peptides, including C31, are potent enhancers of neu apoptosis (By similarity).
SUBUNIT: Binds, via its C-terminus, to the PID domains. are lipophilic metal chelators **Buch** aß

caspase-cleaved neuronal

1 ÷ the PID domain 얁 several

cytoplasmic priceins, including ApBB family members, the ApBA family, MAPKBIP1, and SHC1, Numb and Dabi (By similarity). Binding family, MAPKBIP1, and SHC1, Numb and Dabi (By similarity). Binding to Dabi inhibits its serine phosphorylation (By similarity). Also interacts with GPCR-like protein BPP, FPRLI, APPBP1, IB1, KNS2 (via its TPR domains) (By similarity), APPBP2 (via BaSS) and DDB1. In vitro, it binds MAPT via the MT-binding domains (By similarity). Associates with microtubules in the presence of ATP and in a kinesin-dependent manner (By similarity).

-!- SUBCELLULAR LOCATION: Type I membrane protein. Cell surface protein that rapidly becomes internalized via clathrin-coated pits. During maturation, the immature APP (N-glycosylated in the endoplasmic reticulum) moves to the Golgi complex where complete maturation occurs (O-glycosylated and sulfated). After alphasecretase cleavage, soluble APP is released into the extracellular space and the C-terminal is internalized to endosomes and lavosomes. Some APP accumulates in secretory transport vesicles leaving the late Golgi compartment and returns to the cell surface. Gamma-CTF(59) peptide is located to both the cytoplasm and nuclei of neurons (By similarity).

-!- DOMAIN: The basolateral sorting signal (BaSS) is required for sorting of membrane proteins to the basolateral surface of epithelial cells (By similarity) found in many tyrosine-phosphorylated proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the proteins is remitted for the senorific hinding of the protein is remitted for -

phosphorylated proteins is required for the specific binding or the PID domain. However additional amino acids either N- or C-terminal to the NPXY motif are often required for complete interaction. The PID domain-containing proteins which bind APP require the YENPTY motif for full interaction. These interactions are independent of phosphorylation on the terminal tyrosine are independent of phosphorylation on the terminal tyrosine are independent of phosphorylation on the terminal tyrosine endocytosis (By similarity).

PTM: Proteolytically processed under normal vollence excretase Cleavage by alpha-secretase or alternatively by beta-secretase leads to generation and extracellular release of soluble APP peptides, S-APP-alpha and S-APP-beta, respectively, and the retention of corresponding membrane-anchored C-terminal fragments, C83 and C99. Subsequent processing of C83 by gamma-secretase vields P3 peptides. This is the major secretory pathway and is

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EMBL; AB032550; BAA84580.1; -; mRNA.

EMBL; Z84022; CAB06313.1; -; mRNA.

EMBL; X56127; CAB39592.1; -; mRNA.

BR EMBL; X56127; CAB39592.1; -; mRNA.

BR SPR; P03907; 28-123, 124-189, 287-342, 460-569.

BR SNR; P03907; 28-123, 124-189, 287-342, 460-569.

BR InterPro; IPRO08155; A4 APP

InterPro; IPRO08154; A4 extra.

BR InterPro; IPRO01253; BeTa-APP; 6.

PANTHER, PTHR10083:SP6; BeTa-APP; 6.

PANTHER, PF02177; A4 EXTRA; 1.

PF Fam; PF03494; BeTa-APP; 1.

PR PFAM; PF00217; AM EXTRA; 1.

PR PFAM; PF000759; BASICPTASE.

PRINTS; PR00203; AMYLOIDA4.

PRINTS; PR00204; BETA-AWYLOID.

PRINTS; PR00204; BETA-AWYLOID.

PRINTS; PR00206; BASICPTASE.

PRINTS; PR00006; FA4 EXTRA; 1.

PR PFOSITE; SM00013; KU; 1.

PR PSOSITE; PS00319; A4 EXTRA; 1.

PR PROSITE; PS00212; A4 INTRA; 1.

PROSITE; PS00229; BPTI KUNITZ_2; 1.

PROSITE; PS00280; BPTI KUNITZ_2; 1.

PROSITE; PS002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.
By similarity.

Amyloid beta A4 protein.

Soluble App-alpha (Potential).

Soluble App-beta (Potential).

C9 (By similarity)

Beta-amyloid protein 42 (By similarity).

Beta-amyloid protein 40 (By similarity).

C3 (By similarity).

p3 (42) (By similarity).

p3 (42) (By similarity).

Gamma-CTP (59).

Gamma-CTP (59).

Gamma-CTP (59).

Gamma-CTP (59).

Gamma-CTP (59).
                                                                                                                                                                    (By similarity)
(By similarity)
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                                      Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 30; Conservative
                                                                                                                                                                                                             TOPO DOM
TRANSMEM
TOPO DOM
TOPO DOM
REGION
REGION
REGION
REGION
REGION
REGION
REGION
REGION
                                                                             MOTIF
COMPBIAS
COMPBIAS
COMPBIAS
METAL
18
700
724
291
96
135
181
181
391
491
523
                                                                             Interaction with G(0)-alpha (By similarity).
Basolateral sorting signal.
NPXY motif.
Asp/Glu-rich (acidic).
Poly-Thr.
Copper (By similarity).
Copper (By similarity).
Copper (By similarity).
Copper (By similarity).
Copper (Probable).
Copper or zinc (By similarity).
Required for Cu(2+) reduction (By
                                                                                                                                                                                                              Extracellular (Potential).

Potential.

Cytoplasmic (Potential).

BPTI/Kunitz inhibitor.

BPTI/Kunitz inhibitor.

BPTI/Kunitz inhibitor.

Copper-binding (By similarity).

Copper-binding (By similarity).

Fine binding (By similarity).

Heparin-binding (By similarity).

Heparin-binding (By similarity).

Collagen-binding (By similarity).

Collagen-binding (By similarity).

Collagen-binding (By similarity).

Interaction with G(0)-alpha (By
                                      0,
                                      Score 162; I
Pred. No. 3.5
0; Mismatches
                                   DB 1,
3.5e-15;
0;
                                                         Length 770;
                                       Indels
                                                                             (Ву
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                                       Gaps
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0;

nonamyloidogenic. Alternatively, presenilin/nicastrin-mediated gamma-secretase processing of C99 releases the amyloid beta 2 (Abeta42), major components of amyloid plaques, and the cytotoxic C-terminal fragments, gamma-CTF(50), gamma-CTF(57) and gamma-CTF(59) (By similarity).

C: IPTM: Proteolytically cleaved by caspases during neuronal apoptosis (By similarity). Cleavage at Asp-739 by either caspase-3, -8 or -9 results in the production of the neurotoxic C31 peptide and the increased production of beta-amyloid peptides (By similarity).

C: IPTM: N- and O-glycosylated (By similarity).

C: IPTM: Phosphorylation in the C-terminal on tyrosine, threonine and serine residues is neuron-specific. Phosphorylation can affect App processing, neuronal differentiation and interaction with other proteins (By similarity).

C: IPTM: Extracellular binding and reduction of copper, results in a corresponding oxidation of Cys-144 and Cys-158, and the formation of a disulfide bond (By similarity).

C: INSCELLANDEOUS: Chelation of metal lons, notably copper, iron and resulting in beta-amyloid-metal aggregates (By similarity).

C: SIMILARITY: Belongs to the App family.

C: SIMILARITY: Contains 1 BPT/Kunitz inhibitor domain.

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A Nakata M.;

Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.

2C -1-SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.

DR EMBL; AY498706; AAR97726.1; -; mRNA.

RSSP; QL6019; 1AAP.

DR SKR; QGRH30; 28-123, 124-189, 287-342, 460-569.

DR Ensembl; ENSCAFG0000008557; Canis familiaris.

DR GO; GO:0001487; F. strinegral to membrane; IEA.

DR GO; GO:0004487; F. sbrinding; IEA.

DR GO; GO:0004487; F. sbrinding; IEA.

DR GO; GO:0004867; F. sbrinding; IEA.

DR InterPro; IPR008154; A4 APP.

DR InterPro; IPR008154; A4 -extra.

DR Ffam; PF00179; A4 EXTRA; I.

DR Pfam; PF00179; BASICPTASE.

DR PRINTS; PR00709; BASICPTASE.

DR PRINTS; PR00709; BASICPTASE.

DR PRINTS; PR00709; BASICPTASE.

DR PRINTS; PR00709; BASICPTASE.

DR PRINTS; PR00704; BETAAMYLOID.

DR PROM; PRO002022; PROt Inh Kunz-m; 1.
                RANGE OF STREET 
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QGRH30;
QG-TUTL-2004 (TrEMBLrel. 27, Last
QG-TUTL-2004 (TrEMBLrel.
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RESULT 32
QBWZ99 HUMAN
ID QBWZ99 HUMAN PRELIMINARY;
AC QBWZ99;
AC QBWZ99;
DT 01-MAR-2002 (TrEMBLrel, 2
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Best Local S
Matches 30
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"Relationship between canine dementia and Alzheimer's disea
Submitted (FEB-2005) to the EMBL/GenBank/DDBJ databases.

EMBL; AY926579; AAX81908.1; -; mRNA.

EMBL; AY926579; AAX81908.1; -; mRNA.

SMR; Q56576; 28-123, 124-189, 287-342, 460-569.

R SMR; Q56576; 28-123, 124-189, 287-342, 460-569.

R GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0016021; F:binding; IEA.

R GO; GO:00005488; F:binding; IEA.

R GO; GO:0020037; F:heme binding; IEA.

R GO; GO:0000618; F:bernine-type endopeptidase inhibitor activ
GO; GO:0000618; F:heme binding; IEA.

R GO; GO:000618; F:heme binding; IEA.

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Best Local
Matches 3
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Pfam; PF03494; Beta-APP; 1.
Pfam; PF000014; Kunitz BPTI; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00279; BASICPTASE.
PRINTS; PR00279; BASICPTASE.
PRINTS; PR00204; BETAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
SMART; SM000011; KU; 1.
SMART; SM00111; KU; 1.
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K6 CANFA
Q56JK6_C
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PROSITE; PS00320; A4_INTRA; 1.
PROSITE; PS00280; BPTI_KUNITZ_1; 1.
PROSITE; PS50279; BPTI_KUNITZ_2; 1.
SEQUENCE 770 AA; 86929 MW; 4560E18BB405F588 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAY-2005 (TrEMBLrel. 30, Created)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation updat
Beta-amyloid protein 770.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00320; A4 INTRA; 1.
PROSITE; PS00280; BPTI KUNITZ 1; 1.
PROSITE; PS50279; BPTI KUNITZ 2; 1.
SEQUENCE 770 AA; 86998 MW; 81ADJ
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Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canis familiaris (Dog).
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Pred. No. 3.5e-15;
); Mismatches 0;
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Pred. No. 3.5e-15; Mismatches 0
                                                                          PRT;
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Best Local S
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01-JAN-1998 (TrEMBLrel. 05, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Alzheimer's amyloid beta protein (Fragment).
Name-beta APP;
Cricerote
                                                                                                                                                                                    PRINTS; P
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SEQUENCE
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SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                      Sambamurti K., Pinnix I., Gandhi S.;
Submitted (OCT-1997) to the EMBL/GenBank/DDBJ
EMBL; AF0J0413; AAB86608.1; -; mRNA.
HSSP; P08592; INMJ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AB066441; BAB71958.2; -; mRNA. GO; GO:0010621; C:integral to membrane; IEA. GO; GO:0005488; F:binding; IEA. InterPro; IPR001255; Beta-APP. Pfam; PF03494; Beta-APP; 1.
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PubMed=15201367; DOI=10.1136/jnnp.2003.010611;

Wakutani Y., Watanabe K., Adachi Y., Wada-Isoe K., Uraka
Winomiya H., Saido TC., Hashimoto T., Iwatsubo T., Nakas
"Novel amyloid precursor protein gene missense mutation
"Novel amyloid precursor protein gene missense mutation
probable familial Alzheimer's disease.";
T. Novel T. Novel T. December T. 75.1036.1042/2004)
                                                                                                                                                                                                                                                                              GO; GO:0016021; C:integral to membrane; GO; GO:0005488; F:bhinding; IEA. InterPro; IPR001255; Beta-APP. Pfam; PF03494; Beta-APP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cricetulus griseus (Chinese hamster).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (Human)
Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-MAR-2002 (TrEMBLrel. 20, Last sequence update) 01-MAR-2002 (TrEMBLrel. 20, Last annotation update) Amyloid protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=10029;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Muridae; Cricetinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria;
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                                                                                                                                                                                                                                                      PR00204; BETAAMYLOID
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                                                                                                                  Similarity
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DAEFGHDSGFEVRHQKLVFFAEDVGSNKGA
                                              DAEFRHDSGYEVHHOKLVFFAEDVGSNKGA 30
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                                                                                          88.3%;
ilarity 90.0%;
Conservative
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Euarchontoglires; Primates; Catarrhini; Hominidae;
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Pred. No. le-15;
                                                                                            Pred. No. 2e-
1; Mismatches
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                                                                                                                                        Score 143;
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Nakashima
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RESULT OF COORS OF THE STREET 
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RP CSTRAIN=CS7BL/GG; TISSUE=Lung;

RX MEDILINE=21085660; PubMed=11217851; DOI=10.1038/35055500;

RX MEDILINE=21085660; PubMed=11217851; DOI=10.1038/35055500;

RA Arakawa T., Hara A., Shibata K., Yoshino M., Itoh M., Ishii Y.,

RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,

RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,

RA Kadota K., Matsuda H.A., Gojobori T., Bono H., Kasukawa T., Saito R.,

RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

RA Kadota K., Matsuda H.A., Rishida I., Pesole G., Quackenbush J.,

RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuchl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,

RA Kuchl P., Lewis S., Matsuo M., Carninci P., Washio T.,

RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,

RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,

RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Hyonshein P., Marchionni L., Masshina J., Mazzarelli J., Mombaerts P.,

RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,

RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,

RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

RA Haysshizaki Y.,

RA Haysshizaki Y., Soshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,

RA Haysshizaki Y.,

RA Haysshizak
NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

A the FAIN-657BL/6J; TISSUE-Lung;

A the FAIN-8070M Consortium,

The FAINTOM Consortium,

"Analysis of the mouse transcriptome based on functional annotation of reference the mouse transcriptome based on functional annotation of reference to the mouse transcriptome based on functional annotation of reference to the mouse transcriptome based on functional annotation of reference to the mouse transcriptome based on functional annotation of reference to the mouse transcriptome based on functional annotation of reference to the mouse transcriptome based on functional annotation of cap-trapper-selected cDNAs to reference full-length cDNA libraries for rapid discovery of new genes.";

A Carninci P., Shibata Y., Mayastizaki Y.;

"Normalization and subtraction of cap-trapper-selected cDNAs to represent full-length cDNA libraries for rapid discovery of new genes.";

Cenome Res. 10:1617-1630(2000).

BY NUCLEOTIDE SEQUENCE.

STRAIN-C57BL/6J; TISSUE-Lung;

WEDLINE-20539913; PubMed-11076861; DOI-10.1101/gr.152600;

STRAIN-C57BL/6J; TISSUE-Lung;

X MEDLINE-20539913; PubMed-11076861; DOI-10.1101/gr.152600;

STRAIN-C57BL/6J; TISSUE-Lung;

X Konno H., Aktyama J., Nishi K., Kitsunat T., Tashiro H., Itch M., Sani N., Ishi Y., Nakamura S., Hazama M., Nishine T., Harada A., Nahamara S., Hazama M.,
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Bukaryota; Metazoa; C
Mammalia; Butheria; E
Muridae; Murinae; Mus
NCBI TaxID=10090;
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STRAIN=CS7BL/6J; TISSUE=Lung;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
[2]
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01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mus musculus 13 days embryo lung cDNA, RIKEN full-1
library, clone:D430025B14 product:amyloid beta (A4)
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Chordata; Craniata; Vertebrata; Euteleostomi;
Charchontoglires; Glires; Rodentia; Sciurognathi;
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RA Adachi J., Aizawa K., Akimura T., Harakawa T., Bono H., Carninci P.,
RA Adachi J., Aizawa K., Akimura T., Harakawa T., Hashizume W.,
RA Fukuda S., Furuno M., Hanagaki T., Haraka T., Hirozane T.,
RA Hayashida K., Hayatsu N., Hiramoto K., Hirozane T.,
RA Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
RA Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Koyda S.,
RA Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Okazaki Y.,
RA Kurihara C., Matsuyama T., Miyazaki A., Murata M., Wakamura M.,
RA Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,
RA Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
RA Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
RA Tomaru A., Toya T., Yasunishi A., Muramateu M., Hayashizaki Y.;
RA Tomaru A., Toya T., Yasunishi A., Muramateu M., Hayashizaki Y.;
RA Submitted (JUL-2001) to the EMEL/GenBank/DDBJ databases.

BR GO; GO:0016020; Cimembrane; TAS.
DR HSSP, P08592; 1NMJ.
DR HSSP, P08592; 1NMJ.
DR GO; GO:0016020; Cimembrane; TAS.
DR GO; GO:0010198; P:extracellular matrix organization and bioge. ..; IGI DR GO; GO:0010198; P:extracellular matrix organization and bioge. ..; IGI DR GO; GO:00203; AWINIOIDAA.
DR PRINTS; PR00204; BETAAMYLOID.
DR PRINTS; PR00204; BETAAMYLOID.
DR PRINTS; PR00204; BETAAMYLOID.
DR PROSITE; PS00320, A4_INTRA; 1.

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PS SEQUENCE 218 AA; 24118 MW; 95B55AFDAEID0EF5 CRC64;
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Matches 27
NUCLEOTIDE SEQUENCE.
STRAIN=CSTBL/6J; TISSUB=Head;
STRAIN=CSTBL/6J; TISSUB=Head;
MEDLINE=99279253; PubMed=10349636; De
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cla
"High-efficiency 303:19-44 (1999).
Meth. Enzymol. 303:19-44 (1999).
[2]
NUCLEOTIDE SEQUENCE.
STRAIN=CSTBL/6J; TISSUE=Head;
MEDLINE=21085660; PubMed=11217851; De
MEDLINE=21085660; PubMed=11217851; De
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Mus musculus (Mouse),
Mukaryota; Metazoa; (
Mammalia; Eutheria; I
Muridae; Murinae; Mu
NCBI_TaxID=10090;
[1]
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BL/6J; TISSUE=Lung;
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                                                                                                                                                                                                                                                                                     DOI=10.1016/S0076-6879(99)03004-9;
              DOI=10.1038/35055500
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lires; Rodentia; Sciurognathi;
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Shinagawa A.,

Shibata K.,

Yoshino M.,

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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Aizawa K., Matsuda H.A., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubii F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubii F., Suzuki R., Tomita M., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Butt C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Hordshew P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Hayashizaki Y., Storch K., F.,
RA Hayashizaki Y., Storch R., F.,
                                                                                                                                                                                                                                                                 C STRAIN-C57BL/6J; TISSUE-Head;
A Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
A Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,
A Fukuda S., Furuno M., Hanagaki T., Hiraoka T., Hirozane T.,
A Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
A Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Katoh H., Kawai J., Kojima Y., Kondo S., Komno H., Kouda M., Koya S.,
A Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
A Kurihara K., Nomura K., Ohno M., Ohsato N., Okazaki Y.,
A Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,
A Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
A Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tanaka T.,
A Tagawa A., Tokahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
A Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
E Submitted (APR-2002) to the EMEL/GenBank/DDBJ databases.
EMBL; AKO76506; BAC36369.1; -; mRNA.
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Nature 420:563-573(2002).
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Xenopus laevis (African clawed frog).

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RRRRR OCCOORDITION
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RP NUCLEOTIDE SEQUENCE.

RP STRAIN=C57BL/6; TISSUE=Brain;

RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;

RX Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

RA Klausner R.D., Collins F.S., Wagner L., Shemmen C.M., Schuler G.D.,

RA Altschul S.F. Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heich F.,

RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

RA Bicherton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Sarcia R.A.,

RA Rahay J., Helton E., Ketteman M., Schevchenko Y., Bouffard G.G.,

RA Rahay J., Halton E., Ketteman M., Schverbenko Y., Bouffard G.G.,

RA Rahay J., Halton E., Ketteman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

RA Blakesley R.W., Touchman J.W., Schmutz J., Myers R.M.,

RA Rodriguez S., Karley R.W., Jones S.J.M., Marra M.A.,

RGeneration and initial analysis of more than 15,000 full-length human

RT and mouse cDNA sequences ",

RA Rodriguez S. L., Schmutz J., Skalska U., Smailus D.E.,

RA Rodriguez S. L., Schmutz J., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Ma
Best Loc
Matches
                                                                                                                                                                                       App protein.
Rattus norvegicus (Rat).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euto Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Muridae; Rattus.
NCBI TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Buarchontoglires; Glires; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Name=App;
Mus musculus (Mouse)
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NUCLEOTIDE SEQUENCE.
TISSUE=Prostate;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 O6P6Q5_RAT PRELIMINARY;

O6P6Q5_

O5-JUL-2004 (TremBLrel.

O5-JUL-2004 (TremBLrel.

O5-JUL-2004 (TremBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg R.;
Straus
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STRAIN=C57BL/6; TISSUE=Brain;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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larity 90.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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27,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
Last sequence that annoted the contract of the contra
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Last sequence update)
Last annotation update)
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Pred. No. 2.2e
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
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annotation update)
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2.2e-12;
nes 2;
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tia; Sciurognathi;
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RESULT 39
Q31963 9PIPI
ID Q31963 9PIPI
AC Q91963;
DT 01-NOV-1996 (T
DT 01-MAR-2004 (T
DT 01-MAR-2004 (T
DR APP747;
GN Name=APP747;
OS Xenopus.
OC Amphibia; Batr
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Best Local
Matches
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RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., RA HOpkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., RA Stapleton M.J., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Stapleton M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C., RA Brownstein M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C., RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Raha S.S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Raha Y.J., Hulon B., Ketteman M., Madan A., Kodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Rahaman J.W., Green E.D., Dickson M.C., Rahaman J.W., Green E.D., Dickson M.C., Rahaman J.W., Schmutz J., Myers R.M., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rahaman G., Schmutz J., Myers R.M., Schein J.E., Jones S.J.M., Marra M.A.; Smailus D.E., Rahaman G.C., Schmutz J., Myers R.M., Schein J.E., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schmutz J., Myers R.M., Schein J.E., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schmutz J., Myers R.M., Schein J.S., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schmutz J., Myers R.M., Schein J.S., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schein J.S., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schein J.S., Jones S.J.M., Marra M.A.; Touchman J.W., Green E.D., Dickson M.C., Schein J.S., Garding J. Gardi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U. [2]
Xenopus.
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                             Similarity 90.0
27; Conservative
                                                                                            (TrEMBLrel. 01, (TrEMBLrel. 01, (TrEMBLrel. 26,
                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                        88.3%;
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                                                                                            Created)
Last sequence Last annoted
                                                                                                                                                                                                                                                                                                                                      Score 143; DB 2; 1
Pred. No. 2.3e-12;
1; Mismatches 2;
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                                                                                                                                                                       PRT;
                                                                                            sequence update)
annotation update)
                                                                                                                                                                       747
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                                                                                                                                                                                                                                                                                                                                                                          Length 733;
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                                                                                                                                                                                                                                                                                                                                        0,
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NCBI_TaxID=8353; [1]

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Best Local S
Matches 25
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins F.S., Wagner L., Schamen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buettow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q6NRR1 XENLA
Q6NRR1;
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0005488; F:binding; IEA.
GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4-extra.
InterPro; IPR001255; Beta-APP.
InterPro; IPR002223; Prot inh Kunz-m.
Pfam; PR00177; A4 EXTRA; I.
Pfam; PF00194; Beta-APP; 1.
Pfam; PF00194; Beta-APP; 1.
Pfam; PF00194; Beta-APP; 1.
Pfam; PF00195; BAGICPTASE.
PRINTS; PR00759; BAGICPTASE.
PRINTS; PR00759; BAGICPTASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae; Xenopodinae; Xenopus; Xenopu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRINTS; PR00204; BETAAMYLOID.

ProDom; PD000222; Prot Inh Kunz-m; 1.

SMART; SM00131; KU; 1.

PROSITE; PS00319; A4 EXTRA; 1.

PROSITE; PS00320; A4 INTRA; 1.

PROSITE; PS00280; BPTI KUNITZ 1; 1.

PROSITE; PS00280; BPTI KUNITZ 2; 1.

SEQUENCE 747 AA; 84893 MW; A75E81885681D948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-2004
05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=Kidney;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=8355;
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Xenopus laevis (African clawed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     App protein.
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HSSP; Q16019; 1HZ3.
SMR; Q91963; 26-119, 283-338, 437-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "A Xenopus homologue of the human beta-amyloid precursor developmental regulation of its gene expression."; Biochem. Biophys. Res. Commun. 189:1561-1568(1992).
                                                                                                                                                                                                                                                                                                                                                       MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
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XENLA
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Similarity 83.3%;
25; Conservative
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4 (TrEMBLrel.
4 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
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27,
27,
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Last annotation update)
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Pred. No. 2.4e
4; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 749
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.4e-12;
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RESULT
Q6DJB6
ID Q6
AC Q6
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Name=app.prov;
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Xenopus tropicalis (Cordata; Cordata; Cordata; Cordata; Cordata; Anura; Mes
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Best Local :
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PRINTS; PRO0759; BASICPTASE.

PRINTS; PRO0759; BASICPTASE.

PRINTS; PRO0704; BETAMYLOID.

ProDom; PD000222; Prot_Inh_Kunz-m; 1.

SMART; SM00106; A4_EXTRA; I.

SMART; SM00131; KU; 1.

SMART; SM00131; KU; 1.

SMOSITE; PS00319; A4_EXTRA; 1.

PROSITE; PS00320; A4_INTRA; 1.

PROSITE; PS00320; BPTI_KUNITZ_1; 1.

PROSITE; PS00280; BPTI_KUNITZ_2; 1.

SEQUENCE 749 AA; 84766 MW; 33478C6B6A8C295D CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR008155; A4 APP
InterPro; IPR008154; A4_extra.
InterPro; IPR008154; A4_extra.
InterPro; IPR002235; Beta-APP;
InterPro; IPR002233; Prot inh Ku
pfam; PF002177; A4_EXTRA; T.
Pfam; PF002177; A4_EXTRA; T.
Pfam; PF00014; Meta-APP; I.
PRINTS; PR00203; ANTLOIDA4.
PRINTS; PR00759; BASICPTASE.
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JB6 XENTR
Q6DJB6 XENTR
Q6DJB6;
                                                                                                                               25-OCT-2004 (
25-OCT-2004 (
25-OCT-2004 (
Amyloid beta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
EMBL; BC070668; AAH70668.1; -; mRNA.
EMSP; Q16019; IBA4.
SMR; Q6NRR1; 27-122, 285-340, 439-548.
G0; G0:0016021; C:integral to membrane; IEA.
G0; G0:0005488; F:binding; IEA.
G0; G0:0004867; F:serine-type endopeptidase inhibitor activity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M., Skalsku U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";
 NUCLEOTIDE SEQUENCE TISSUE=Whole body;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Klein S., Strausberg
Submitted (MAY-2004)
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MEDLINE=22341132;
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initiative."
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(TremBLrel. 28, Last sequence update)
(TremBLrel. 28, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genomic tools for Xenopus research:
                                                       Western clawed frog) (Silurana tropicalis)
Chordata; Craniata; Vertebrata; Euteleostor
Anura; Mesobatrachia; Pipoidea; Pipidae;
; Silurana.
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to the EMBL/GenBank/DDBJ databases.
ains 1 BPTI/Kunitz inhibitor domain.
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Pred. No. 2.4e-12;
4; Mismatches 1
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nexin-II, Alzheimer
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RI FIRMS PR.L., Pelingold E.A., Grouse L.H., Derge J.G.,
RA Alausher R.D., Colllins F.S., Wagner L.,
Rahmmen C.M., Schuler G.D.,
RA Allushul S.F., Zeeberg B., Buctow K.H., Schaefer C.F., Bhar N.K.,
RA Hopkins R.F., Jordan H., Woore T., Max S.I., Wang J., Haich F.R.,
RA Hopkins R.F., Jordan H., Woore T., Max S.I., Wang J., Haich F.R.,
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RA Hopkins R.F., Jordan H., Woore T., Max S.I., Wang J., Haich F.R.,
RA Hopkins S., Korley R.G., Toshiyaki S., Carninci P., Frange C.,
RA Baha S.S., Loquellamo N.A., McBerner G.J., Malek J.A., Gunzadne P.H.,
RA Hillalon D.K., Marley B., McKernan K.J., Malek J.A., Gunzadne P.H.,
RA Hillalon D.K., McMerter G.J., Malek J.A., Gunzadne P.H.,
RA Hillalon D.K., McMerter G.J., McMerter R.M.,
RA Hillalon D.K., McMerter R.J., Dickson M.C.,
RA Balakes Ly R.W., Touchman J.W., Green B.J., Liu X., Gibbs R.A.,
RA Hillalon D.K., McMerter R.M., Rodrigues S., Sanchez A.,
RA Hillalon D.K., McMerter R.M., Rodrigues S., Sanchez A.,
RA Hillalon D.K., McMerter R.M., Rodrigues S., Sanchez A.,
RA Hillalon D.K., McMerter R.M., Rodrigues S., Sanchez A.,
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RA Hillalon D.K., McMerter R.M., Rodrigues R.M.,
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RA Hillalon D.K., Rodrigues R.M., Rodrigues
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Best Local S
Matches 25
A4 MOUSE STANDARD; PRT; 770 AA.
P13023; P97487; P97942; Q99K32;
01-OCT-1989 (Rel. 12, Created)
10-OCT-1989 (Rel. 42, Last sequence update)
13-SEP-2005 (Rel. 42, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Amyloid beta A4 protein precursor (APP) (ABPP) (Alzheimer's disease amyloid protein homolog) (Amyloidogenic Glycoprotein) (AG) [Contains: soluble APP-alpha ; SOluble APP-beta); C99
(APP-C99); Beta-amyloid protein 42 (Beta-APP42); Beta-amyloid protein
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25; Conservative
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Pred. No. 2.4
4; Mismatches
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RP PARTIAL NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM APP770).

RC TISSUE-Mammary tumor;

RX MEDLINE-22388257; pubmed=12477932; DOI=10.1073/pnas.242603899;

RX Strausborg R.L., Peingold E.A., Grouse L.H., Derge J.G.,

RX Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

RA Altechul S.F., Zeeberg B., Buecow K.H., Schaefer C.F., Bhat N.K.,

RA Altechul S.F., Jordan H., Moore T., Max S.L., Wang J., Hsieh F.,

RA Hopkins R.F., Jordan H., Moore T., Max S.L., Wang J., Hsieh F.,

RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Stapleton M., Ugddin T.B., Toshiyuki S., Carninci P., Prange C.,

RA Raha S.S., Loquellano N.A., Peters G.J., Malek J.A., Gunaratne P.H.,

RA Raha S.S., Loquellano N.A., Peters G.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA Villalon D.K., Muzhy D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;

RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;

RA Generation and initial analysis of more than 15,000 full-length human

RT Tagen R.M., Schein J.E., Jones S.J.M., Marra M.A.;

REL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
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MEDILINE=92209998; PubMed=1555768; DOI=10.1016/0378-1119(92)90375-Y;
IZUMİ R., Yamada T., Yoshikai S.I., Sasaki H., Hattori M., Sakai Y.,

"Positive and negative regulatory elements for the expression of the Alzheimer's disease amyloid precursor-encoding gene in mouse.";

Gene 112:189-195(1992).
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STRAIN=SAMP8; TISSUE=Hippocampus;
STRAIN=SAMP8; TISSUE=Hippocampus;
MEDLINE=21130647; PubMed=11235921; DOI=10.1139/bcb-79-1-57;
MEDLINE=2130647; PubMed=11235921; DOI=10.1139/bcb-79-1-57;
MEDLINE=2130647; PubMed=11235921; DOI=10.1139/bcb-79-1-57;
MEDLINE=2130647; PubMed=11235921; DOI=10.1139/bcb-79-1-57;
MEDLINE=2130647; PubMed=11235921; DOI=10.1139/bcb-79-1-57;
MIMBAT V.B. Vyas K., Franko M., Choudhary V., Buddhiraju C.,
Alvarez J., Morley J.E.;
Morley J.E.;
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Name=App; Muse).

Name=App; Muse).

Nume=App; Muse).

Nume=App; Muse; Chordata; Craniata; Vertebrata; Euteleostomi; Museidae; Muridae; Mu
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MEDLINE-88106489; PubMed=3322280;
Yamada T., Sasaki H., Furuya H., Miyata T., Goto
"Complementary DNA for the mouse homolog of the !
protein precursor.";
Biochem. Biophys. Res. Commun. 149:665-671(1987)
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STRAIN=BALB/c; TISSUE-Brain;

MEDLINE=9296458; PubMed=1756177; DOI=10.1016/0167-4781(91)90231-A;

de Strooper B., van Leuven F., van den Berghe H.;

"The amyloid beta protein precursor or proteinase nexin II from mous
is closer related to its human homolog than previously reported.";
Biochim. Biophys. Acta 1129:141-143(1991).
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Yamada T.;
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precursor protein binds Numb and inhibits Notch signaling.

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Fukuchi K., Martin G.M., Deeb S.S
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"Structure and expression of the alternatively-spliced
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TISSUE=Brain, and
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TISSUE=Placenta
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                                                                                                                        PROCESSING,
                                                                                     PubMed=11553691;
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nuclear fraction of neurones in culture.";
J. Neurochem. 78:1168-1178(2001).
-I- FUNCTION: Functions as a cell surface
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to substitutions of transient metal chelating residues. Beta-APP42 may activate mononuclear phagocytes in the brain and elicit inflammatory responses. Promotes both tau aggregation and TPK II-mediated phosphorylation (By similarity). The gamma-CTF peptides as well as the caspase-cleaved representation.
                                                                                                                                                                                                                                                                   cytoplasmic proteins, including APBB family members, the APBA family, MAPKBIPI, SHC1, Numb and Dab1. Binding to Dab1 inhibits its serine phosphorylation. Also interacts with GPCR-like protein BPP, FPRLI, APPBP1, IB1, KWS2 (via its TPR domains), APPBP2 (via BBS) and DDB1 (By similarity). In vitro, it binds MAPT via the MT-binding domains (By similarity). Associates with microtubules in the presence of ATP and in a kinesin-dependent manner (By similarity). Interacts, through a C-terminal domain, with GNAO1 (By similarity). Amyloid beta-42 binds CHRNA7 in hippocampal neurons (By similarity). Beta-amyloid associates with HADH2 (By
                                                                                                                                                       P98084:Apba2; NbExp=1;
Q9QXJ1:Apbb1; NbExp=1;
P97318:Dab1; NbExp=1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptides, including C31, are potent enhancers of neuro apoptosis.
SUBUNIT: Binds, via its C-terminus, to the PID domain.
                                                                                                                                                                                                                             INTERACTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FUNCTION: Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 reduction. Can regulate neurite outgrowth through binding to components of the extracellular matrix such as heparin and collagen I and IV (By similarity). The splice isoforms that contain the BPTI domain possess protease inhibitor activity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell mobility and transcription regulation through protein-protein interactions. Can promote transcription activation through binding to APBBI/Tip60 and inhibit Notch signaling through interaction
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01-AUG-1988 (Rel. 08, Created)
01-DEC-1992 (Rel. 24, Last sequence update)
113-SEP-2005 (Rel. 48, Last annotation update)
Amyloid beta A4 protein precursor (APP) (Alzheimer's disease amyloid protein homolog) (Amyloidogenic glycoprotein) (AG) [Contains: Soluble protein homolog) (Amyloidogenic glycoprotein) (AG) [Contains: Soluble APP-alpha (S-APP-alpha); Soluble APP-beta (S-APP-beta); C99; Beta-amyloid protein 40 (Beta-APP40); Beta-amyloid protein 40 (Beta-APP40); Gamma-cTF(59) (Gamma-secretase C-terminal fragment 59); Gamma-CTF(57) (Gamma-secretase C-terminal fragment 57);
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      Rodentia; Sciurognathi;
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MEDLINE-88312583, PubMed-29
Shivers B.D., Hilbich C., M
Seeburg P.H.;
"Alzheimer's disease amyloi-
rat brain suggests a role i.
EMBO J. 7:1365-1370(1988).
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MEDLINE=91217087; PubMed=1673681;
Potempska A., Styles J., Mehta P.,
"Purification and tissue level of
of rat brain.";
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and aging.";
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MEDLINE-88264430; PubMed-2968652;
MEDLINE-88264430; PubMed-2968652;
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Science 241:223-226
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MEDILINE=95263526; PubMed=7744833; DOI=10.1074/jbc.270.20.

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MEDILINE=21443797; PubMed=11483588; DOI=10.1074/jbc.C100357200;

Gu Y., Misonou H., Sato T., Dohmae N., Takio K., Ihara Y.;

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J. Biol. Chem. 276:35235-35238 (2001).
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NCBI_TaxID=10116;
[1]
                            MEDLINE=99127916; PubMed=9930726; Watanabe T., Sukegawa J., Tomita S., Iiji Suzuki T., Naira A.C., Greengard P.; "A 177-kDa protein (UV-DDB) binds to the Alzheimer's amyloid precursor protein."; Neurochem. 72:549-556(1999).
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Kang J., Mueller-Hill B.;
"The sequence of the two extra exons in the sequence of the two extra exons in the sequence of the two extra exons in the sequence of the sequence
                                                                                                                              INTERACTION WITH DDB1, TYR-762.
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MEDLINE=97150061; PubMed=8996834;
Mandbrink R., Monning U., Masters C.
Sandbrink R., Monting U., Masters C.
"Expression of the APP gene family i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALTERNATIVE SPLICING.
MEDLINE=96187032; PubMed=8624099;
Mandbrink R., Masters C.L., Beyreuther
"APP gene family. Alternative splicing
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                                                                                                                                                                            43:119-131(1997).
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 GNAO1,
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bich C., Multhaup
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PHOSPHORYLATION.

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Greengard P., Suzuki T.;

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phosphorylated at Thr654, Ser655, and
cultured cells.";

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"The amyloid precureor protein interacts protein within a cell compartment error: "transdiver'er"
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Scarpa R.C., Cuajungco M.P., Gray D.N., Lim
Bush A.I.;
"The A beta peptide of Alzheimer's disease
peroxide through metal ion reduction.";
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Kirino Y., Greengard P., Suzuki T.;
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during neuronal differentiation.";
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Greengard P., Hairn A.C., Suzuki T.;
Phosphorylation of the Cytoplasmic domain of Al
precursor protein at Ser655 by a novel protein k
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Huang X., Atwood C.S., Hartshorn M.A., Multhaup G., Goldstein
Scarpa R.C., Cuajungco M.P., Gray D.N., Lim J., Moir R.D., Tar
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BETA-AMYLOID METAL-BINDING
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Ando K., Oishi M., Takeda S., Iiji
Kirino Y., Greengard P., Suzuki T.
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MEDLINE=20396183; PubMed=10936190.
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T., Ando K., Czernik A.J., U
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"Sequence of an alternative
homolog.";
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**Splice isoforms that contain the BPII domain possess protease inhibitor activity (By similarity).**

**WINCTION: Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as copper, zinc and iron. Rat and mouse beta-amyloid peptides bind constructions of transient metal chelators transient metals and have little reducing activity due
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EMBL; AY267348; AAP23169.1; -; mRNA. MGI; MGI:88059; App. GO; GO:0016021; C:integral to membrane:
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                                                                                                                                                                                                                  Muridae; Murinae;
NCBI_TaxID=10090;
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Mammalia; Eutheria; Euarchonto
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FUNCTION: Functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant physiological functions.
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Best Local
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Best Local
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Q98SF9;
01-JUN-2001 (
01-JUN-2001 (
01-MAR-2004 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q547B7 RAT
Q547B7;
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GO; GO:00
GO; GO:00
SEQUENCE
Brain
[2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa;
Mammalia; Eutheria;
Muridae; Murinae; Ra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-SEP-2005
13-SEP-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Feng J., Song S., Zheng J.;
"A new beta amyloid precursor protein cDNA for fibroblasts.";
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ
                                  MEDIINE=21610087; PubMed=11744158; DOI=10.1016/S0169-328X(01)00279-0; Van den Hurk W.H., Bloemen M., Martens G.J.M.; Van den et gene encoding the beta-amyloid precursor protein APP in Xenopus laevis.";
                                                                                                                                                                                             Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Ve:
Amphibia; Barrachia; Anura; Mesobatrachia;
                                                                                                                                                                                                                                                          Name=app;
                                                                                                                                                                                                                                                                             Beta-amyloid precursor protein
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                                                                                                                     NUCLEOTIDE SEQUENCE.
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                                                                                                                                                                              kenopodinae;
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                    in Xenopus laevīs.";
in Res. Mol. Brain Re
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GO:0005515; F:protein binding;
GO:0030198; P:extracellular mat
JENCE 770 AA; 86752 MW; 26C5
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27; Conserv
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                                                                                                                                                                                                                                                                                             (TrEMBLrel. 17, Created)
(TrEMBLrel. 17, Last seq
(TrEMBLrel. 26, Last ann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                        Xenopus;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             90.0%;
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                      97:13-20(2001)
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Last annotation updatein B.
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Last annotation updat
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No. 2.4e-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 2.4
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Pred. No. 2.4e-12;
L; Mismatches 2;
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ar matrix organization an
26C50DE0890CAF7A CRC64;
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                                                                                                                                                                                                 Vertebrata; I
ia; Pipoidea;
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; Pipidae;
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RY NUCLEOTIDE SEQUENC
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GO; GO:0016021; C:integral to membrane; IE
GO; GO:0005488; F:binding; IEA.
InterPro; IPRO08155; A4 APP.
InterPro; IPRO08154; A4 extra.
InterPro; IPRO08154; A4 extra.
InterPro; IPRO08154; A4 extra.
InterPro; IPRO08154; A4 extra.
InterPro; IPRO08155; Beta APP.
Pfam; PF02177; A4 EXTRA; 1.
Pfam; PF03494; Beta APP; 1.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
SIGNAL 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ol-JÜN-2003 (TrEMBLrel. 24, Created)
Ol-JÜN-2003 (TrEMBLrel. 24, Last sequence update)
Ol-MAR-2004 (TrEMBLrel. 26, Last sequence update)
MGC52816 protein.
Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Messobatrachia; Pipoidea; Pipidae;
Xenopodinae; Xenopus; Xenopus.
NCBI_TaxID=8355;
[1]
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Van den Hurk W.H.;

Thesis (2001), Department of Biologi.
Thesis (2001), Department of Biologi.
Mijmegen, Nijmegen, Netherlands.
EMBL; AJ298151; CAC37194.1; -; mRNA.
HSSP; Q16019; HTZ3.
SMR; Q98SF9; 27-122, 385-494.
TISSUE=Embryo;
MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
                                                         NUCLEOTIDE SEQUENCE.
TISSUE=Embryo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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XENLA
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Similarity 80.0%;
24; Conservative
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695 AA;
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; DC14EB02AFB0204A CRC64;
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Best Local S
Matches 24
    Iljima K., Lee D.-S., Okutsu J., Tomita S., Hirashime Suzuki T.;
CDNA isolation of Alzheimer's amyloid precursor prot cholinergic nerve terminals of the electric organ of ray, ", and the electric organ of Biochem. J. 330:29-33(1998).

EMBL; AB005544; BAA24230.1; -; mRNA.

EMBL; AB005544; BAA24230.1; -; mRNA.

EMBL; AB005544; BAA24230.1; -; mRNA.

EMSP; QJ10019; 1HZ3.

R SNR; O57394; 40-135, 136-201, 389-498.

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

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R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R GO; GO:0016021; C:integral to membrane;

R SNR; O57394; 40-135, 136-201, 389-498.

R FRINTS; PRO0204; BETANATIOIDA.

R SNR; O57394; 40-135, 136-201, 389-498.

R SNR; O57394; 40-135,
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SMR; 072XQ0; 27-122, 385-494.

GO; GO:0016021; C:integral to meml
GO; GO:005488; F:binding; EA.

InterPro; IPR008155; A4_APP.

InterPro; IPR008154; A4_extra.

InterPro; IPR008124; A6_extra.

InterPro; IPR001255; Beta-APP.

Pfam; PP02197; A4_EXTRA; 1.

PRINTS; PR00203; AMYLOJDA4.

PRINTS; PR00204; BETAAMYLOJD.

SMART; SM00006; A4_EXTRA; 1.

PROSITE; PS00320; A4_EXTRA; 1.

PROSITE; PS00320; A4_EXTRA; 1.

PROSITE; PS00320; A4_EXTRA; 1.

SROSITE; PS00320; A4_EXTRA; 1.

SROSITE; PS00320; A4_EXTRA; 1.
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194 NARJA
O57394 NARJA
O57394;
O1-JUN-1998
O1-JUN-1998
O1-MAR-2004
EL amyloid pr
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Narke japponica (Blectric ray).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
Blasmobranchii; Squalea; Hypnosqualea; Pristiorajea; Batoidea;
Torpediniformes; Narcinoidei; Narkidae; Narke.
NCBI_TaxID=62965;
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Submitted (JAN-2003) to the
EMBL; BC044324; AAH44324.1;
HSSP; Q16019; 1HZ3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE.
TISSUE=Electric lobe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Genetic and genomic tools initiative.";
Dpv. Dyn. 225:384-391(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Klein S.L., !
Richardson P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=98129705; PubMed=9461486;
Iijima K., Lee D.-S., Okutsu J., '
Suzuki T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Embryo;
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Similarity 80.0%;
24; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
Last sequence update)
Last annotation update)
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-; mRNA.
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Pred. No. 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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M. Mauceli E., Bouneau L., Fischer C., Ozouf-Costez C., Bernot A.,
Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.
A. Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.
A. Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
A. Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
A. Anthouard V., Jubin C., Cattolico L., Poulain J., De Berardinis V.,
A. Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A. Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A. Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A. Cruaud C., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.
A. Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.
A. Kellis M., Volff JN., Guigo R., Zody M.C., Mesirov J.,
A. Kellis M., Volff JN., Guigo R., Saurin W., Scarpelli C.,
A. Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi N.
A. Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
M. Genome duplication in the teleost fish Tetraodon nigroviridis revolute early vertebrate proto-karyotype.",
The early vertebrate proto-karyotype.",
Mature 431:946-957 (2004).
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Best Local S
Matches 24
                                                                                                                                                                     Query Match
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Matches 23
A4 TETFL
073683;
10-OCT-2003
10-OCT-2003
                                                                                                                                                                                                                                                       PROSITE;
PROSITE;
SEQUENCE
                                                                                                                                                                                                                                          NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tetraodon nigroviridis (Green puffer).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;

Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;

Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Chromosome 3 SCAF14978, whole genome shotgun sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q4RY33 TETNG
Q4RY33;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=99883;
                                                                                                                                                                                                                             SEQUENCE
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TETNG
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PS00320;
699 AA;
                                                                                                              ETEDRQSTEYEVHHQKLVFFAEDVGSNKGA
                                                                                                                             DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA 30
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ETEFQQDSGYEVHHQKLVFFPKDVGSNKGA 630
                                                                                                                                                                                                                             754 AA;
                                                                                                                                                                      Conservative
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                                          STANDARD;
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A; 78879 MW
42,
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76.7%;
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80.0%;
Last sequence
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2; Mismatches
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Pred. No.
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Amyloid;
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SIGNAL
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PRINTS; PR00759; BASICPTASE.
PRINTS; PR00204; BETAAMYLOID
ProDom; PD000222; Prot Inh K.
SMART; SM00006; A4_EXTRA; 1.
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Pfam; PF03494; Beta-APP; 1.
Pfam; PF00014; Kunitz_BPTI; 1.
                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR008155; A4_APP.
InterPro; IPR008154; A4_extra.
InterPro; IPR00155; Beta-APP.
InterPro; IPR002223; Prot inh Kun;
PANTHER; PTHR10083:SF6; Beta-APP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; AF018165; AAC41275.1; -; HSSP; P10646; 1IRH. SMR; 073683; 29-124, 478-586.
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MEDLINE=98252138; PubMed=9599080; DOI=10.1016/S0378-1119(98)00032-8;

Villard L., Tassone F., Crnogorac-Jurcevic T., Clancy K., Gardiner K

"Analysis of pufferfish homologues of the AT-rich human APP gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tetraodon fluviatilis (Puffer fish).
Eukaryota; Metazoa; Chordata; Cranitata; Vertebrata; I
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodo
Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                         PROSITE;
                                                                                                                                                                                                                                                                                                           SMART;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      between
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Alzheimer's disease
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBCELLULAR LOCATION: Type I membrane protein.
SIMILARITY: Belongs to the APP family.
SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
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682
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                                                                                                                                                                                                                                                                                                        SM00006; A4_EXTRA;
SM00131; KU; 1.
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; PS00319; A4 EXTRA; 1.
; PS00320; A4 INTRA; 1.
; PS00280; BPTI KUNITZ 1; F
; PS50279; BPTI KUNITZ 2; 1
; Glycoprotein; Protease in
                                                      Similarity
              DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (By similarity)
ETEDROSTEYEVHIQKLVFFAEDVGSNKGA
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By similarity.
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By similarity.
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pathway through
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                                                                                                               Potential.

Cytoplasmic (Potential).

Cytoplasmic inhibitor.

BPTJ/Kunitz inhibitor.

Clathrin-binding (By similarity)

" "inhad (GlcNAc. . .) (Potential)
                                                    Score
Pred.
                                                                                                                                                                                                     Alzheimer's disease homolog.
                                                                                                                                                                                 Extracellular
                                                                                                                                                                                            Beta-amyloid
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                                            Mismatches
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Neoteleostei;
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RA Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
RA Mauceli E., Bouneau L., Fischer S., Lutfalla G., Dossat C., Segurens B.,
RA Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
RA Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
RA Bismont C., Salanoubat M., Levy M., Boudet N., Castellano S.,
RA Bismont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
RA Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
RA Findblad-Toh K., Girren B., Neckernan K.J., McEwan P., Bosak S.,
RA Kallis M., Volff JN., Guigo R., Zody M.C., Mesirov J.,
RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
RA Laudet V., Schacher V., Quetier F., Saurin W., Scarpelli C.,
RA Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.,
RA Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.,
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Best Local S
Matches 21
C - : SIMILARITY data.

C - : SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.

C - : SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.

R EMBL; CARBO1014781; CARO5838.1; -; Genomic_DNA.

R InterPro; IPRO08155; A4_APP.

R InterPro; IPRO08155; Beca-APP.

R InterPro; IPRO01255; Beca-APP.

R InterPro; IPRO01253; Prot inh Kunz-m.

R Pfam; PF02177; A4_EXTRA; I .

R Pfam; PF02177; A4_EXTRA; I .

R Pfam; PF00144; Beca-APP; 1.

R Pfam; PF00014; Kunitz_BPTI; 1.

R PFAMTS; PR00103; AMYLOIDA4.

R PRINTS; PR00203; AMYLOIDA4.

R PRINTS; PR00204; BETAMYLOID.

R PRODOM; PD000222; Prot Inh Kunz-m; 1.

R PARTY SM00006; A4_EXTRA; I .

R SMART; SM00101; KUT_1 .

R PROSITE; PS00210; A4_EXTRA; 1.

R PROSITE; PS00220; A4_EXTRA; 1.

R PROSITE; PS00230; BPTI KUNITE 2; 1.

R PROSITE; PS00230; BPTI KUNITE 2; 1.
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Q4S0J4;
13-SEP-2005
13-SEP-2005
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13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last sequence.
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
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SEQUENCE
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Genoscope; Whitehead Institute Centre for Genome Research;
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
-!- CAUTION: The sequence shown here is derived from an
EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry whi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=99883;
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QBUUI8 BRARE
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SMR; Q8UUI8; 62-170.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniform
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01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation updat
                                                                                                                                                                             Brachydanio rerio (Zebrafish)
Bukaryota; Metazoa; Chordata;
Actinopterygii, Neopterygii; T
Cyprinidae; Danio.
                                                                                                                                                                                                                                                                                                                                                          01.MAR-2002 (TrEMBLrel. 20, Created)
01.MAR-2002 (TrEMBLrel. 20, Last seg
01.MAR-2004 (TrEMBLrel. 26, Last ann
Putative membrane protein (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00320; A4_INTRA; 1.
NON TER 1 1
SEQUENCE 357 AA; 40962 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZFIN; ZDB-GENE-000616-13; appa. GO; GO:0016621; C:integral to membrane; GO; GO:0005488; F:binding; IEA. InterPro; IPRO08155; A4 APP. InterPro; IPRO01255; BeTa-APP. Pfam; PP03494; Beta-APP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=Whole embryo;
PubMed=11862463; DOI=10.1007/s00427-001-0189-9;
Musa A., Lehrach H., Russo V.E.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii;
Cyprinidae; Danio.
CNCBI_TaxID=7955;
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TISSUE=Brain;
PubMed=11862463; DOI=10.1007/800427-001-0189-9;
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                                                                         NUCLEOTIDE SEQUENCE.
                                                                                                                                            NCBI_TaxID=7955;
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PR00204; BETAAMYLOID.
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Last annotation update)
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Pred. No. 1.2e
2; Mismatches
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Pred. No. 2.6e-08;
5; Mismatches 4
                                                                                                                                                                                                          ) (Danio rerio).
; Craniata; Vertebrata; Euteleostomi;
Teleostei; Ostariophysi; Cypriniformes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07D99EEF6C55B2D8 CRC64;
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Best Local S
Matches 22
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GO; GO:0016021; C:integral to mem
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4_APP.
InterPro; IPR008154; A4_extra.
InterPro; IPR001255; BeTa-APP.
Pfam; PF02177; A4_EXTRA; 1.
Pfam; PF02177; A4_EXTRA; 1.
PFAM; PF03494; BeTa-APP; 1.
PRINTS; PR00204; BETA-AMYLOID.
PRINTS; PR00204; BETA-AMYLOID.
PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
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612 AA; 69710 MW; 59.
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9E7_BRARE
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Q919E7;
Q91-OCT-2000
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Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii; 1
Cyprinidae; Danio.
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HSSP; Q16019; 1HZ3.
SMR; Q919E7; 1-56; 317-425.
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Dev. Genes Evol. 211:563-567(2001).
EMBL; AJ315636; CAC85733.1; -; mRNA.
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SMR; Q8UUS0; 177-285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Slavov D.B., Gardiner K.;
Submitted (APR-2000) to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Amyloid protein (Fragment).
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PRINTS; PR00204; BETAAMYLOII
PROSITE; PS00320; A4_INTRA;
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InterPro; IPR001255; Beta-APP.
Pfam; PF03494; Beta-APP; 1.
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                                                                                                                                                                Score 102.5; DB 2
Pred. No. 2.2e-06;
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Ostariophysi;
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Q6NUZ1 BRARE PRELIMINARY;
Q6NUZ1;
Q5-UUL-2004 (TrEMBLrel. 27, Cr
O5-UUL-2004 (TrEMBLrel. 27, La
O5-UUL-2004 (TrEMBLrel. 27, La
Amyloid beta (A4) protein a.
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Brachydanio rerio (Zebrafish) (Danio rerio).
Brachydanio rerio (Zebrafish) (Danio rerio).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
[1]
NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

NEDLINE=22388557; PubMed=12477932; DOI=10.1073/pnas.242603899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.K.,

Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schaetz T.E.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schaetz T.E.,

Brownstein M.J., Usdin T.B., Toshiyaki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
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Pred. No. 2.5e-06;
2; Mismatches 3;
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01-DEC-2001 (TrEMBLrel. 19, Las
01-MAR-2004 (TrEMBLrel. 26, Las
Amyloid protein.
Name-appa; Synonyms-app;
Brachydanio rerio (Zebrafish) ((
Eukaryota; Metazoa; Chordata; C
Bukaryota; Metazoa; Chordata; C
Actinopterygii; Neopterygii; Te
Cyprinidae; Danio.
NUCLEOTIDE SEQUENCE.
Groth C., Lardelli M.;
Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases.
-I- SIMILARITY: Contains 1 BPTI/Kunitz inhibitor domain.
-IBSL, AP389401; AAK64495.1; -; mRNA.
HSSP; Q16019; 1HZ3.
HSSP; Q16019; 1HZ3.
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l Similarity 73.3%;
22; Conservative
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1. Acad. Sci. U.S.A. 99:16899-16903(2002).
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                                                                                                                                                                                                                                                                                                                                                            Created)
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pred. No. 2.7e-06;
2; Mismatches 3;
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Madan A., Rodrigues S.,
Shevchenko Y., Bouffard
een E.D., Dickson M.C.,
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  Query Match
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                                                                   CFIN; ZDB-GENB-020220-1; appb.

GO; GO:0016021; C:integral to membrane; IEA.

GO; GO:0005488; F:binding; IEA.

InterPro; IPR008155; A4_APP.

InterPro; IPR001255; Beta-APP.

PRINTS; PR00204; Beta-APP; 1.

PRINTS; PR00204; BETAAMYLOID.

PRINTS; PR00204; BETAAMYLOID.

PROSITE; PS00320; A4_INTRA; 1.

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Pfam; PF03194; Beta-APP; 1.
Pfam; PF00014; Kunitz BFTI; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00759; BASICPTASE.
PRINTS; PR00204; BETAAMYLOID.
                                                                                                                                                                                                    PubMed=11862463; DOI=10.1007/800427-001-0189-9;
Musa A., Lehrach H., Russo V.R.
"Distinct expression patterns of two zebrafish homologues
APP gene during embryonic development.";
Dev. Genes Evol. 211:563-567(2001)
EMBL; AJ315638; CAC85735.1; -, MRNA.
HSSP; Q16019; LIYT.
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Brachydanio rerio (Zebrafish)
Bukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii; T
Cyprinidae; Danio.
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01-MAR-2002 (TrEMBLrel. 20,
01-MAR-2004 (TrEMBLrel. 26,
Putative membrane protein (F
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GO; GO:0005488; F:binding; IEA.
GO; GO:0004867; F:serine-type endopeptidase inhibitor activity; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 extra.
InterPro; IPR001255; Beta-APP.
InterPro; IPR002223; Prot inh Kunz-m.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE; PS00319; A4_EXTRA; 1.
PROSITE; PS00320; A4_INTRA; 1.
PROSITE; PS00280; BPTI_KUNITZ_1; 1.
PROSITE; PS50279; BPTI_KUNITZ_2; 1.
SEQUENCE 738 AA; 83577 MW; AF48
                                                    SEQUENCE
                                                                                                                                                                                            Ensemb
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  Local Similarity hes 18; Conser
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SM00006; A4 EXTRA; I.
SM00131; KU; 1.
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                                                    239 AA;
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                                                    27048 MW;
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 Score 101;
Pred. No. 1.
7; Mismatche
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; Craniata; Vertebrata; Euteleostomi; Teleostei; Ostariophysi; Cypriniform
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Pred. No. 2.7
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     Mismatches
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1.3e-06;
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& Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

& Klausner R.D., Collins F.S., Magner L., Shenmen C.M., Schuler G.D.,

& Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

& Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

& Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,

& Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

& Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,

& Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,

& Stapleton M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

& Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

& Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

& Raha S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

& Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,

& Wilting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

& Holkesley R.W., Touchman J.W., Geren B.D., Dickson M.C.,

& Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

**Genoration and intial analysis of more than 15,000 full-length human

**Genoration and intial analysis of more than 15,000 full-length human
                                                                  Query Ma
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Matches
                                                                                                                                ZFIN; ZDB-GENB-020220-1; appb.
GO; GO:0016021; C:integral to me
GO; GO:0005488; F:binding; IEA.
InterPro; IPR008155; A4 APP.
InterPro; IPR008154; A4 EXTRA; 1.
Pfam; PF002177; A4 EXTRA; 1.
Pfam; PF003494; Beta-APP; 1.
PRINTS; PR00203; AMYLOIDA4.
PRINTS; PR00204; BETAAMYLOID.
SMART; SM00006; A4 EXTRA; 1.
PROSITE; PS00320; A4 INTRA; 1.
SEQUENCE 362 AA; 40986 MW; 5
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes;
Cyprinidae; Danio.
NCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                          Director MGC Project;
Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC083534; AAH83534.1; -; mRNA.
SMR; Q5XIY5; 30-93, 88-177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Generation and initial analysis of more than 15,000 full-length and mouse cDNA sequences.";
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25-OCT-2004 (TrEMBLrel.
25-OCT-2004 (TrEMBLrel.
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Q5XIY5;
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                 DAEFRHDSGYEVHHQKLVFFAEDVGSNKGA
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Pred. No. 2.1e-06
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C TISSUE=Brain;
C TISSUE=Brain;
X PubMed=11862463; DOI=10.1007/s00427-001-0189-9;
X PubMed=11862463; DOI=10.1007/s00427-001-0189-9;
X PubMed=11862463; DOI=10.1007/s00427-001-0189-9;
X PubMed=11862463; DOI=10.1007/s00427-001-0189-9;
T APP gene during embryonic development.";
LD Dev. Genes Evol. 211:1563-567(2001).
R EMBL; AJ315639; CAC85736.1; -; mRNA.
DR HSSP; Q16019; 11YT.
DR SMR; Q16019; 11YT.
DR SMR; Q16019; 30-125, 126-191, 400-509.
DR ZFIN; ZDB-GENE-020220-1; appb.
C CO:0016021; C:integral to membrane; IEA.
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Best Local S
Matches 18
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907917_BOVIN
907917_BOVIN PRELIMINARY;
097917;
01-MAY-1999 (TYEMBLrel. 10, C
01-MAY-1999 (TYEMBLrel. 10, L
01-MAY-1999 (TYEMBLREL. 26, L
Amyloid protein (Fragment).
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UNP BRARE
QBUUR9_BRARE PRELIMINARY;
QBUUR9;
QBUUR9;
QBUUR9;
QBUUR9;
QBUUR9;
QBURBLrel. 20, C
QL-MAR-2002 (TEMBLrel. 20, C
QL-MAR-2004 (TEMBLrel. 26, L
QL-MAR-2004 (TEMBLE). 26, L
Putative membrane protein.
                                                                                                                               NUCLEOTIDE SEQUENCE.

MEDLINE=20063685; PubMed=10594237; DOI=10.1007/s003359901180; MEDLINE=20.63, Licence V.E., Miller J.R.; Konfortov B.A., Licence V.E., Miller J.R.; "Resequencing of DNA from a diverse panel of cattle reveals a level of polymorphism in both intron and exon."; Mamm. Genome 10:1142-1145(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                               Bos taurus (Bovine).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi Eukaryota; Metazoa; Chordata; Craniata; Cetartiodactyla; Ruminantia; Mammalia; Butheria; Laurssiatheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovinae; Bos.

NCBI_TaxID=9913;

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Brachydanio rerio (Zebrafish)
Eukaryota; Metazoa; Chordata;
Actinopterygii; Neopterygii; T
Cyprinidae; Danio.
NCBI_TaxID=7955;
     NUCLEOTIDE Miller R.;
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7; Mismatches
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; Craniata; Vertebrata; Euteleostomi;
Teleostei; Ostariophysi; Cypriniformes;
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RX MEDLINE=22977040; PubMed=14621292;

RA Nakamura Y., Kaneko T., Sato S., Mimuro M., Miyashita H., Tsuchiya T.,

RA Nakamura Y., Matenabe A., Kawashima K., Kishida Y., Kiyokawa C.,

RA Takeuchi C., Yamada M., Matsumo A., Nakazaki N., Shimpo S.,

RA Takeuchi C., Yamada M., Tabata S.;

RT Typinglete genome structure of Gloeobacter violaceus PCC 7421, a

RT Cyanobacterium that lacks thylakoids.";

RL DNA, Res. 10:137-145(2003).

DR EMBL; BA000045; BAC90745.1; -; Genomic_DNA.

BR EMBL; BA000045; BAC90745.1; -; Genomic_DNA.

DR GO; GO:0003984; F:catalytic activity; IEA.

GO; GO:0003984; F:catalytic activity; IEA.

GO; GO:0003984; F:catalytic activity; IEA.

DR GO; GO:0003982, F:branched chain family amino acid biosynthesis; IEA.

DR GO; GO:0009082, F:branched chain family amino acid biosynthesis; IEA.

DR GO; GO:0009082, F:branched Chain family amino acid biosynthesis; IEA.

DR GO; GO:0009082, F:branched Chain family amino acid biosynthesis; IEA.

DR GO; GO:0003984; F:catalytic activity; IEA.

DR GO; GO:0003082, F:branched Chain family amino acid biosynthesis; IEA.

DR GO; GO:0003082, F:prenzyme M.

RINterPro; IPRO12001; TPP-enzyme C.

DR InterPro; IPRO12001; TPP-enzyme C.

DR InterPro; IPRO12001; TPP-enzyme M.

DR InterPro; IPRO12001; TPP-enzyme M.

DR InterPro; IPRO12001; TPP-enzyme M.

DR Pfam; PFO2775; TPP-enzyme M; 1.

DR Pfam; PFO2775; TPP-enzyme M; 1.

DR Pfam; PFO2776; TPP-enzyme M; 1.
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01-MAR-2004 (TrEMBLrel. 26, Created)
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01-MAR-2004 (TrEMBLrel. 26, Last annot
Acetolactate synthase.
Name=ilvB, OrderedLocusNames=gll2804;
Gloeobacter violaceus.
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T4 GLOVI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bacteria; Cyanobacteria; Gloeobacteria;
NCBI_TaxID=33072;
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EYAHDTGYPVKPQKIIYDLRQVLGSEDILISDVGAHK 383
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                                                     EFRHDSGYEVHHOKLVF-----FAEDVGSNK
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Pred. No. 5.3;
7; Mismatches
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Matches 17
                                                                                                                            MEDLINE=91016851; PubMed=2216735; Zhou X.R., Fang R.X., Wang C.Q., Mang FCDNA sequence of the 3'-coding region
                                                                                                                                                                                                                                                                01-MAY-1991 (Rel.
01-MAY-1991 (Rel.
13-SEP-2005 (Rel.
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NON TER
SEQUENCE
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EMBL; AJ495762; CAD42184.1; -; mRNA.
GO; GO:0019028; C:viral capsid; IEA.
InterPro; IPR001592; Poty coat.
Pfam; PF00767; Poty_coat; 1.
Capsid protein; Polyprotein.
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QEEXBO;
25-OCT-2004 (TrEMBLrel. 2
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                                          Urcuqui-Inchima S., Haenni A.L., "Potyvirus proteins: a wealth of Virus Res. 74:157-175(2001).
                                                                                                                                                               NUCLEOTIDE SEQUENCE [GENOMIC RNA].
                                                                                                                                                                                    NCBI_TaxID=12218;
                                                                                                                                                                                                                                                                                       01-MAY-1991
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"Characterization of
Submitted (JUL-2004)
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25-OCT-2004 (TrEMBLrel.
Polyprotein (Fragment).
                                                                            MEDLINE=21127308;
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FUNCTION: Coat protein is involved in aphid transmission, cell and systemis movement, encapsidation of the viral RN the regulation of viral RNA amplification.
FUNCTION: Nuclear inclusion protein B is a RNA-dependent
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17; Conserv
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                                                     PubMed=11226583; DOI=10.1016/S0168-1702(01)00220-9; ., Haenni A.L., Bernardi F.; ns: a wealth of functions.";
                                                                                                                                                                                                                                        48, Last annotation update)
n [Contains: Nuclear inclusion protein B
polymerase) (EC 2.7.7.48); Coat protein
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48, Last annotation updat
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                                                                                                           18:5554-5554 (1990)
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4) to the EMBL/GenBank/DDBJ databases.
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Query Match
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PIR; A60924; A60924.
GO; GO:0019028; C:viral capsid; II
InterPro; IPR001592; Poty_coat.
InterPro; IPR001205; RNA_pol_P3D.
InterPro; IPR001205; RNA_tol_P3D.
                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                     Fitopatol. Bras. 26:45-52(2001)
EMBL; AF255659; AAG44632.1; -;
                                                                                                                                                                                                                                                                                                                                                              "Analysis of the nucleotide sequentranslated region of two Brazifitopatol. Bras. 26:45-52(2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=Ordinary;
Inoue-Nagata A.K., Fonseca M.E.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=12216;
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Pfam; PF00680; RdRP_1; 1.
Capsid protein; Nucleotidyltransferase; Polyprotein;
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InterPro; IPR001205; RNA_pol_P3D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polymerase that plays an essential role in the virus CATALYTIC ACTIVITY: Nucleoside triphosphate + RNA(n)
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RdRP_1; 1.
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DE POLYPOTOLIS (TREMBLRE)
OC VITUSES; SERNA POSITIVE-SI
OC POLYVITUS
OC NCBI_TAXID=12216;
RN [1]
R
P NUCLEOTIDE SEQUENCE.

C STRAIN-ORDINARY;

B Bhat A.I., Varma A., Pappu H.R., Rajamannar M., Jain R.K.,

R "Characterization of a potyvirus from eggplant (Solanum mel

T a strain of potato virus y by N-terminal serology and seque

T relationships.";

1 Plant Pathol. 48:648-654 (1999).

P Plant Pathol. 48:648-654 (1999).

R EMBL; AF118153; AAD24563.1; -; Genomic_RNA.

R PIR; A60924; A60924.

R GO; GO:0019028; C:viral capsid; IEA.

R InterPro; IPR001592; POLY_Coat.

R InterPro; IPR001592; RNA_Pol_P3D.
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QSJTW2;
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01-OCT-2002 (TrEMBLrel. 25, Last
01-OCT-2003 (TrEMBLrel. 25, Last
01-OCT-2004 (Trembler).
Polyprotein (Fragment).
Polyprotein (Fragment).
Potato virus Y.
Viruses; sSRNA positive-strand vi
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COLARICCLO A., Elras M., Chaves A.L.R.;

COLARICCLO A., Elras M., Chaves A.L.R.;

Wholecular characterization of a potato vi
palinacanthum.";

Submitted (JUN-2002) to the EMBL/GenBank/D

EMBL; AF525081; AAM93091.1; -; mRNA.

EMBL; AF525081; C.viral capsid; IEA.

InterPro; IPR001292; Poty_coat.

InterPro; IPR001292; RNA.pol.P3D.

Pfam; PF00767; Poty_coat; 1.

Pfam; PF00680; RdRP_1; 1.
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               RESULT 70

POLG PVYN

POLG PVYN

POLG PVYN

POLG PVYN

AC

P19247; Q85266; Q85267; Q85268; Q85270; Q85271; Q85272;

AC

P19247; Q85266; Q85267; Q85268; Q85270; Q85271; Q85272;

AC

Q85273;

DT

O1-MOV-1990 (Rel. 16, Created)

DT

13-SEP-2005 (Rel. 3), Last sequence update)

DT

O1-SEP-2005 (Rel. 3), Last sequence update)

DT

Genome polyprotein [Contains: P1 proteinase (W-terminal protein);

E Helper component proteinase (EC 3.4.22.45) (HC-pro); Protein P3; 6 kDa

E Helper component proteinase (EC 3.4.22.45) (HC-pro); Nuclear

DE protein 1 (6K1); Cytoplasmic inclusion protein (EC 3.6.1.-) (CI); 6

E kDa protein 2 (6K2); Viral genome-linked protein (VPg); Nuclear

DE inclusion protein A (EC 3.4.22.44) (NI-a) (NIa-pro) (49 kDa

Proteinase) (49 kDa-Pro); Nuclear inclusion protein B (EC 2.7.7.48)

DE (NI-b) (NIb) (RNA-directed NNA polymerase); Coat protein (CP)].

OS Potato virus Y (strain N) (PVY).
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Best Local S
Matches 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 53.1%;
Matches 17; Conservative
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QGEX78 9POTV PRELIMINARY; P.
QGEX78;
QGEX78;
25-CCT-2004 (TrEMBLrel. 28, Created Control Cont
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Submitted (JUL-2002) to the EMBL/veller.
EMBL; Ar495764; CAD42186.1; -; mRNA.
GO; GO:0019028; C:viral capsid; IEA.
InterPro; IPR001592; Poty_coat.
Pfam; PF00767; Poty_coat; 1.
Capsid protein; Polyprotein.
Capsid protein; Polyprotein.
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STRAIN-Indian E;

Garg I., Spetz C., Khurana S., Mukherjee K., S

"Characterization of potato virus Y isolates i

"Characterization of the EMBL/GenBank/DDBJ

Submitted (JUL-2004) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00767; Poty_coat;
Pfam; PF00680; RdRP_1; 1.
Polyprotein.
NON TER 1 1
SEQUENCE 365 AA; 41418
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NCBI_TaxID=12216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              85
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1 Similarity 53.1%;
17; Conservative
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182
182 AA;
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Last sequence that the contract of th
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Pred. No. 7.5;
0; Mismatches
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-; mRNA.
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Pred. No. 8.1;
0; Mismatches
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from India.";
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NUCLEOTIDE SEQUENCE.
MEDLINE=89279275; PubMed=2732709;
MEDLINE=89279275; PubMed=2732709;
Robaglia C., Durand-Tardif M., Tronchet M., Boudazin G.,
Robaglia C., Durand-Tardif M., Tronchet M., Boudazin G.,
Astier-Manifacier S., Casse-Delbart F.;
Astier-Manifacier S., Casse-Delbart F.;
"Nucleotide sequence of potato virus Y (N Strain) genomic RNA.";
J. Gen. Virol. 70:935-947(1989).
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Durand-Tardif M.;
                                                                                                                           This Swiss-Prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         may be involved FUNCTION: Both (By similarity)
                                                                                                                                                                      processing by the main proteinase NIa-pro resulting in production of at least ten individual proteins. The pand the HC-pro cleave only their respective C-termini autocatalytically. 6KI is essential for proper proteo separation of P3 from CI (By similarity).

SIMILARITY: Belongs to the potyviruses polyprotein fasimilarity: Contains 1 peptidase C4 domain.

SIMILARITY: Contains 1 peptidase C5 domain.

SIMILARITY: Contains 1 peptidase C5 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           terminus, commonly in the sequence -Tyr-Xaa-Val-Gly-|-Gly, in the processing of the potyviral polyprotein.

DOMAIN: The N-terminus of helper component proteinase is involved in interaction with stylets. The central part is involved in interaction with virions and the C-terminus is involved in cell movement of the virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               proteolytic activities.

CATALYTIC ACTIVITY: Hydrolyzes glutaminyl bonds, and activity is further restricted by preferences for the amino acids in P6 - P1' that vary with the species of potyvirus, e.g. Glu-Xaa-Xaa-Tyr-Xaa-Gln-|-(Ser or Gly) for the enzyme from tobacco etch virus. The natural substrate is the viral polyprotein, but of their proteins and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cell and systemis movement, encapsidation of the viral RNA and in the regulation of viral RNA amplification.
FUNCTION: Nuclear inclusion protein B is a RNA-dependent RNA polymerase that plays an essential role in the virus replication.
FUNCTION: Helper component proteinase is required for aphid transmission and also has proteolytic activity. Interacts with
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTM: VPg is covalently linked to the genomic RNA (By sim PTM: The viral RNA of potyviruses is expressed as a sing polyprotein which undergoes posttranslational protectivity
                             98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                virions and aphid stylets. Seen transcriptional gene silencing
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: Cytoplasmic inclusion protein has helicase activity. may be involved in replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               oligopeptides containing
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Swiss Institute or back.

Bioinformatics Institute.

Frontent is in no wa
                                                 entry is copyright. It is produced through a collaboration iss Institute of Bioinformatics and the EMBL outstation oinformatics Institute. There are no restrictions on its
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in the sequence -Tyr-Xaa-Val-Gly-|
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cing (PTGS), a mechanism of plant viral
cumulation of viral RNAs. May have RNA-
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Cytoplasmic inclusion p
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6 kDa protein 2 (By sim
Viral genome-linked pro
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Nuclear inclusion
similarity).
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PURCLEOTIDE SEQUENCE.

COSTRAIN=N-Egypt;

COSTRAIN=N-Egypt;

Abdel El-Mohsen N.M.A., Gamal El-Dinn A.S., Sohair I.E.-A.,

Sadik A.S., Abdelmaksoud H.M.;

"Characterization of potato virus Y strain 'N-Egypt'.";

Ann. Agric. Sci. 48:485-504 (2003).

REMBL; AF522296; AAM81207.1; -; Genomic_RNA.

REPIR; A60924; A60924.

REPIR; B46341; B46341.

REGO; GO:00019028; C.viral capsid; IEA.

GO; GO:00019028; C.viral capsid; IEA.

GO; GO:00019028; F.AFP binding; IEA.

GO; GO:00008524; F.AFP binding; IEA.

GO; GO:00008526; F.AFP dependent helicase activity; IEA.

GO; GO:00004197; F.Cysteine-type endopeptidase activity; IEA.

GO; GO:0000373; F.RNA binding; IEA.

GO; GO:0003733; F.RNA binding; IEA.

GO; GO:0003733; F.RNA binding; IEA.

GO; GO:0003508; F.RNA-directed RNA polymerase activity; IEA.

GO; GO:0003508; F.RNA-directed RNA polymerase activity; IEA.

GO; GO:0003509; F.Viral genome replication; IEA.

REGO; GO:00019079; F.Viral genome replication; IEA.

REGO; GO:0001509; F.Viral genome replication; IEA.

REGO; GO:00005509; F.VIRA-DIRECT

REGO; GO:0005509; F.RNA-DIRECT

REGO; GO:0005509; F.RNA-DIRECT

REGO; GO:0005509; F.RNA-DOLDEAH N.

InterPro; IFR001750; Peptidase_C6.

REINTERPO; IFR001750; RNA-DOLDEAH N.

RINTERPO; IFR001750; RNA-DOLDEAH N.

REGO; GO:0005063; RNA-DOLDEAH N.

REGO; GO:00050650; RNA-DOLDEAH N.

REGO; GO:0005065; RNA-DOLDEAH N.

REGO; GO:00050650; RNA-DOLDEAH N.

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OBJQ05_9POTV 1

OBJQ05;

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O1-OCT-2002 (1)
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Potato virus Y.
Viruses; ssRNA positive-strand viruses, no
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01-OCT-2002 (TrEMBLrel.
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nuclear inclusion-VPg.
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No. 1.7e+02;
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SEQUENCE
                                                                             Li L., Barnantine J., Zhang Q., Amonsin A., Alt D., Kapu
Submitted (SEP-2003) to the EMBL/GenBank/DBU databases.
EMBL; AE017239; AAS05945.1; -; Genomic_DNA.
GO; GO:0016021; C:integral to membrane; IEA.
GO; GO:0000271; P:polysaccharide biosynthesis; IEA.
GO; GO:0006810; P:transport; IEA.
InterPro; IPR007267; GtrA.
Pfam; PF04138; GtrA; 1.
Complete proteome; Hypothetical protein.
Complete 221 AA; 24838 MW; 9804D0855CFA67CC CRC64;
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NUCLEOTIDE SEQUENCE.

1 is., Ding X., Hatle J.D., Borst D.W.; Hathaway M.J., Li S., Ding X., Hatle J.D., Borst D.W.; Hathaway M.J., Li S., Ding X., Hatle J.D., Borst D.W.; Indoor grasshopper."; Lobber grasshopper."; Lobb
                                                  Mycobacterium paratuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Mycobacteriaceae; Mycobacterium;
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VCBI_TaxID=1770;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cell and systemis movement, encapsidation of the viral RNA and in the regulation of viral RNA amplification.
-!- FUNCTION: Nuclear inclusion protein B is a RNA-dependent RNA polymerase that plays an essential role in the virus replication.
-!- CATALYTIC ACTIVITY: Nucleoside triphosphate + RNA(n) = diphosphate
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MEDLINE=89295509; PubMed=2740238;

Bravo-Almonacid F.F., Mentaberry A.N.;

"Nucleotide cDNA sequence coding for ti
"Nucleic Acids Res. 17:4401-4401 (1989).
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01-OCT-1989 (Rel. 12, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Genome polyprotein [Contains: Nuclear inclusion protein B
(RNA-directed RNA polymerase) (EC 2.7.7.48); Coat protein
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use as long a
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                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                                                                          Pfam;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTM: The viral RNA of potyviruses is expressed as a single polyprotein which undergoes posttranslational proteolytic processing by the main proteinase NIa-pro resulting in the production of at least ten individual proteins (By similar SIMILARITY: Belongs to the potyviruses polyprotein family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IS Res. 74:157-173 (2001).
FUNCTION: Coat protein is involved in aphid transmission, c
                                                                                                                                                                                                                                                                                                                                             ; X14136; CAA32356.1; -; mRNA.
S04723; S04723.
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PF00767; Poty coat; 1.

d protein; Nucleotidyltransferase; Polyproirected RNA polymerase; Structural protein rected RNA polymerase; Nuclear Nuclear 17
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1; Mismatches
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OC POLYVITU
OX NCBI_Tax
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DR G0; G0; D0;
DR InterPro
DR InterPro
DR FIR; A60
DR G0; G0; G0; G0;
DR G7 G0; D7
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P NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

C STRAIN=ATCC 35210 / B31;

X MEDLINE=98065943; PubMed=9403685; DOI=10.1038/37551;

X MEDLINE=98065943; PubMed=9403685; DOI=10.1038/37551;

X MEDLINE=98065943; PubMed=9403685; DOI=10.1038/37551;

X MEDLINE=98065943; PubMed=9403685; DOI=10.1038/37551;

X MEDLINE=98065943; PubMed=9800 R.J., Hickey E.K.,

A Fraser C.M., Casipens S., Dougherty B.A., Tomb J.-F., Fleischmann R.D.,

A Gwinn M.L., Dougherty B.A., Tomb J.-F., Fleischmann R.D.,

A Richardson D.L., Peterson J.D., Kerlavage A.R., Quackenbush J.,

A Richardson D.L., Peterson J.D., Kerlavage A.R., Quackenbush J.,

A Richardson D.L., Peterson J.D., Kerlavage A.R., Watthey L., McDonald J.A.,

B Salzberg S.L., Hanson M., van Vugt R., Watthey L., McDonald J.

B Gocayne J.D., Weidman J.F., Utterback T.R., Watthey L., McDonald J.

B Gocayne J.D., Weidman J.F., Utterback T.R., Watthey L., McDonald J.

B Artiach P., Bowman C., Garland S.A., Fujii C., Cotton M.D., Horst

B Roberts K.M., Hatch B., Smith H.O., Venter J.C.;

"Genomic sequence of a Lyme disease spirochaete, Borrelia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation updat
Hypothetical protein BB0228.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Griffin J.D., Shiel P.S., Berger P.H., Thornbury D.W.; Submitted (DEC-1991) to the EMBL/GenBank/DDBJ databases EMBL; M81435; AAA47185.1; -; Genomic_RNA.

PIR; A60924; A60924.

GO; GO:0019028; C:vuiral capsid; IEA.

InterPro; IPR001592; Poty_coat.

Pfam; PF00767; Poty_coat; 1.
EMBL; AE001133; AAC66621.1;
                                                                              This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OrderedLocusNames=BB0228;
Borrelia burgdorferi (Lyme disease spirochete).
Bacteria, Spirochaetes; Spirochaetales; Spirochaetaceae; Borrelia;
Borrelia burgdorferi group.
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Best Local Similarity 50.0%;
Matches 13; Conservative
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QGCA59_ARATH PRELIMINARY;

QGCA59_CONTROL (TEMBLE). 17, Created)

10.-UNN-2001 (TEMBLE). 17, Last sequence update)

11.-UN-2001 (TEMBLE). 29, Last annotation update)

12.-UN-2005 (TEMBLE). 29, Last annotation update)

13.-UN-2005 (TEMBLE). 29, Last annotation update)

14.-UN-2006 (TEMBLE). 29, Last annotation update)

15.-UN-2006 (TEMBLE). 29, Last annotation update)

16.-UN-2006 (TEMBLE). 29, Last annotation update)

17.-UN-2006 (TEMBLE). 29, Last annotation; 76220-741

18.-UN-2006 (TEMBLE). 29, Last annotation; 76220-741

29.-UN-2006 (TEMBLE). 29, Last annotation; 76220-741

20.-UN-2006 (TEMBLE). 29, Last annotation update)

20.-UN-2006 (TEMBLE). 29, Last annotation update)

21.-UN-2006 (TEMBLE). 29, Last annotation update)

22.-UN-2006 (TEMBLE). 29, Last annotation update)

23.-UN-2006 (TEMBLE). 29, Last annotation update)

24.-UN-2006 (TEMBLE). 29, Last annotation update)

25.-UN-2006 (TEMBLE). 29, Last annotation update)

26.-UN-2006 (TEMBLE). 29, Last annotation update)

27.-UN-2006 (TEMBLE). 29, Last annotation update)

28.-UN-2006 (TEMBLE). 29, Last annotation update)

29.-UN-2006 (TEMBLE). 29, Last annotation update)

20.-UN-2006 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             phosphate.

-!- SIMILARITY: Belongs to the PPP phosp
EMBL; AF032879; AAB84178.1; -; mRNA.
HSSP; 008209; 1M63.
GO; GO:0016787; F:hydrolase activity; II
InterPro; IPR004843; M-pesterase.
InterPro; IPR006186; T phtase_apaH.
Pfam; PF00149; Metallophos; 1.
PRINTS; PR00114; STPHPHTASE.
SMART; SM00156; PPZAC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OZ2662 ARATH PRELIMINARY;
OZ2662 O1-160 (TrembLrel 05, CO1-JAN-1998 (TrembLrel 05, IO1-JAN-1998 (TrembLrel 26, IO1-JAN-2004 (TrembLrel 26, IO1-JAN-2004)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Horvath D.
Submitted
-1- CATALY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIR;
TIGR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
NCBI_TaxID=3702;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hydrolase;
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR007863; Peptidase_M16_C.
Pfam; PF05193; Peptidase_M16_C; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUCLEOTIDE
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vach D.M., Chua N.-H.;

vach D.M., Chua N.-H.;

nitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.

CATALYTIC ACTIVITY: A phosphoprotein + H(2)0 = a protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    D70128; D70128.
BB0228; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 DSGYEVHHQ-KL--VFFAB---DVGSNKGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21.7%;
Similarity 56.7%;
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DAE---FRHDSGYEVHHQKLVFFAED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         proteome; Hypothetical protein.
971 AA; 112960 MW; 088A688D7BBC591A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DAEGYYFKHESGLEVFHLKSDSFKEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Iron.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21951 MW;
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Last
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Pred. No. 79;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 53; DB
Pred. No. 16;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPP phosphatase family.
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annotation
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annotation update)
2A inhibitor; 76220-74135
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on update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 195;
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                                                                                    eudicots;
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            RESULT
OF REAL PROPERTY OF THE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
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Best Local S
Matches 10
                                                                                                                                                                                                                                                                                                                                                                                                                                             OBRG41 FUSNN PRELIMINARY;
OBRG41;
OBSG41;
O1-JUN-2002 (TrEMBLrel. 21,
O1-JUN-2002 (TREMBLrel. 21,
O1-MAR-2004 (TrEMBLrel. 26,
Cell wall endopeptidase fan
OrderedLocusNames=FN0477;
Fusobacterium nucleatum (su
Bacteria, Fusobacteria; Fus
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NUCLEOTIDE S
Lin X., Kaul
Maiti R., Ro
Barnstead M
Submitted (([2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
Town C.D., Kaul S.;
Submitted (JAN-2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=76856;
                                                                                                                                                                                                                                                                                                                                                                                                                        Fusobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DAQHKEDAGDEIHDEVADIIKEDLWSN 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DAEFRHDSGYEVHHQKLVFFAEDVGSN 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M.E., Bowman (OCT-1999) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32.7%;
ilarity 37.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g C.M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 53; DB
Pred. No. 22;
6; Mismatches
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A Shinn P. Chenk R., Kim C.J., Koesema E., Meyers M.C.,

A Tracy S.E., Banh J., Bowser L., Carninci P., Chung M.K.,

A Roldsmith A.D., Hayashizaki Y., Ishida J., Jones T., Kamiya A.,

A Karlin-Neumann G., Kawai J., Lam B., Lee J.M., Lin J., Liu S.X.,

A Miranda M., Narusaka M., Nguyen M., Palm C.J., Pham P.K., Quach H.L.,

A Miranda M., Vamada K., Yu G., Shinozaki K., Davis R.W., Theologis A.,

Toriumi M., Yamada K., Yu G., Shinozaki K., Davis R.W., Theologis A.,

B Coker J.R.;

A Cocker J.R.;

B Lee J.M., Southwick A., Tang C.C.,

A Cocker J.R.;

B Lee J.M., Southwick A., Tang C.C.,

Colomited (MAY-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AC011765; AAG52377.1; -; Genomic_DNA.

EMBL; AX08173; AAL63386.1; -; mENA.

EMBL; AF385720; AAK60311.1; -; mENA.

EMBL; AF385720; AAK60311.1; -; mENA.

EMBL; AF38574; G96774.

EQ; GO:0005634; C:nucleus; IEA.

EX GO: GO:0005634; C:nucleus; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NÜCLEOTIDE SEGUENCE.
Cheuk R., Chen H., Kim C.J., Meyers M.C., Banh J., Bowser L.,
Cheuk R., Chen H., Kim C.J., Meyers M.C., Banh J., Hayashizaki Y.,
Carninci P., Chang E., Dale J.M., Goldsmith A.D., Hayashizaki Y.,
Ishida J., Jones T., Kamiya A., Karlin-Neumann G., Kawai J., Lam
Lee J.M., Lin J., Miranda M., Narusaka M., Nguyen M., Ondera C.S.
Palm C.J., Quach H.L., Sakurai T., Satou M., Seki M., Southwick A
Tang C.C., Toriumi M., Wu H.C., Yamada K., Yamamura Y., Yu G., Yu
Shinozaki K., Davis R.W., Theologis A., Ecker J.R.,
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
NUCLEOTIDE SEQUENCE.

NUCLEOTIDE SEQUENCE.

STRAIN-ATCC 25586;

MEDLINE=21886394; PubMed=11889109;

MEDLINE=21886394; PubMed=11889109;

MEDLINE=1128/JB.184.7.2005-2018.2002;

Kapatral V., Anderson I., Ivanova N., Reznik G., Los T.

Kapatral V., Anderson I., Gardner W., Grechkin G.,

Vasieva O., Chu L., Kogan Y., Chaga O., Gordnern E., Be

Larsen N., D'Souza M., Walunas T., Pusch G., Haselkorn

Fonstein M., Kyrpides N.C., Overbeek R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     wn C.D., Benito M., Creasy T.M., Koo H., Fujii C.Y., Utt
man C.L., White O., Nierman
) to the EMBL/GenBank/DDBJ o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21, Created)
21, Last sequence update)
26, Last annotation update)
family M23/M37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (subsp. nucleatum).
Fusobacterales; Fusobacteriaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL/GenBank/DDBJ
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C.Y., Utterback T.
. Nierman W.C., Fra
.nk/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₿
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                                              kin G., Zh.
Bernal ,
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                                                                                                                                                                               Lykidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
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k A.,
Yu S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .с.,
h н.т.,
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SQ SQ

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RESULT
Q662D6
ID Q6
AC Q6
DT 25
DT 25
DT 25
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Best Local S
Matches 11
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Best Local Similarity
Matches 10; Conser
   ILT 81
D6 BORGA
Q662D6 BORGA
Q662D6;
25-OCT-2004
25-OCT-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Genome sequence of the cyanobacterium Prochlorococcus marinus sa nearly minimal oxyphototrophic genome.";
Proc. Natl. Acad. Sci. U.S.A. 100:10020-10025(2003).
EMBL; AE017162; AAP99373.1; -; Genomic DNA.
GO; GO:0016798; F:hydrolase activity, acting on glycosyl bonds;
GO; GO:0005975; P:carbohydrate metabolism; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-SARG / CCMP 1375 / SS120;
MEDLINE-22810154; PubMed-12917486; DOI=10.1073/pnas.1733211100;
Dufresne A., Salanoubat M., Partensky F., Artiguenave F., Axman.
Barbe V., Duprat S., Galperin M.Y., Koonin E.V., Le Gall F.,
Makarova K.S., Ostrowski M., Oztas S., Robert C., Rogozin I.B.,
Scanlan D.J., Tandeau de Marsac N., Weissenbach J., Wincker P.,
Wolf Y.I., Hess W.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AE009951; AAL94673.1; -; Genomic_DNA.
GO; GO:0004222; F:metalloendopeptidase activity; IEA
GO; GO:0016998; P:cell wall catabolism; IEA.
GO; GO:0016998; P:proteolysis and peptidolysis; IEA.
InterPro; IPR002482; LysM.
InterPro; IPR002482; LysM.
Pfam; PP01551; Peptidase_M23B.
Pfam; PP01551; Peptidase_M23; 1.
SMART; SM00257; LysM; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last sequence
01-MAR-2004 (TrEMBLrel. 26, Last annotation of the control of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR002860; Glyco_hydro_BNR. Pfam; PF02012; BNR; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Prochlorococcus marinus. Bacteria; Cyanobacteria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q7VDP1_PROMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleatum strain ATCC 25586.";
J. Bacteriol. 184:2005-2018(2002).
EMBL; AE009951; AAL94673.1; -; Gen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prochlorococcus.
NCBI_TaxID=1219;
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PROMA
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                                                                                                                          BORGA
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                                                                                                                                                                                                                                                                                                                                     EFRHDSGYEVHHQKLVFFAEDVGSN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       339
   (TrEMBLrel. (TrEMBLrel. (TrEMBLrel.
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                                                                                                                             PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       37498 MW;
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Pred. No. 28;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                4;
Created)
Last sequence update)
Last annotation update)
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Pred.
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                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                             53;
No.
                                                                                                                                                                                                                                                                                                                                        27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 339
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   RESULT 82
Q85274 9POTV
ID 205224, 9POTV PRELIMINARY;
AC Q85274;
AC MEDLINE-92335011;
AC MEDLINE-92350;

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Best Local S
Matches 11
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+ RNA(n+1).

EMBL; D12539; BAA02107.1; -

PIR; A60924; A60924.

PIR; JT0959; JT0959.

PIR; JT0959; JT0959.

PC1072; PC1072.
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STRAIN=0;
STRAIN=0;
MEDLINE=92335011; PubMed=1630927;
MEDLINE=92335011; PubMed=1630927;
MEDLINE=92335011; PubMed=1630927;
MEDLINE=92335011; PubMed=1630927;
MEDLINE=9235011; PubMed=1630927; PubMed
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SEQUENCE 972 AA; 113320 MW; BD2FFEC9279B7562 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hypothetical protein.
OrderedLocusNames=BG0231;
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Borrelia burgdorferi gro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Borrelia garinii.
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                                                                                                                                                                            GO:0019028; C:viral capsid; IEA.
GO:0005524; F:ATP binding; IEA.
GO:0008026; F:ATP-dependent helicase activity; IEA.
GO:0008026; F:RNA binding; IEA.
GO:0003723; F:RNA binding; IEA.
GO:0003726; F:RNA binding; IEA.
GO:0003768; F:RNA-directed RNA polymerase activity; IEA.
GO:0016740; F:transferase activity; IEA.
GO:0006508; P:proteolysis and peptidolysis; IEA.
GO:0006509; P:transcription; IEA.
GO:0006350; P:transcription; IEA.
GO:0006350; P:viral genome replication; IEA.
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|:|||| | | | | |
FKHDSGLEVFHLKSDSFKB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Res. 20:3515-3515(1992).
ACTIVITY: Nucleoside triphosphate
   Peptidase_C4.
Poty_coat.
RNA_pol_DS_PS.
RNA_pol_P3D.
RNA_pol_PSvir.
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R Pfam; PF0077; PCV_coat; 1.
R Pfam; PF0077; PCV_coat; 1.
R Pfam; PF00866; RARP_1; 1.
R PRINTS; PR00966; NIĀPOTYPTASE.
W Capsid protein, Polyprotein; Protease; RNA replication; W Structural protein.
T CHAIN 285
T CHAIN 286
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NUCLEOTIDE SEQUENCE:

PUBMed=15467720; DOI=10.1038/ng1447;

PUBMed=15467720; DOI=10.1038/ng1447;

PUBMed=15467720; DOI=10.1038/ng1447;

PUBMed=15467720; DOI=10.1038/ng1447;

PUBMED J. Glaser P. Bouchier C., Vandenesch F., Kur Etienne J., Glaser P., Buchrieser C.;

PUBL; Charles J. Bouchier C., Vandenesch F., Kur Nat. Genet 36:1165-1173(2004)

Nat. Genet 36:1165-1173(2004)

Nat. Genet 36:1165-1173(2004)

PUBL; CR628337; CAH15707.1; -; Genomic_DNA.

REMBL; CR628337; CAH15707.1; -; Genomic_DNA.

REMBL; CR628337; CAH15707.1; -; Genomic_DNA.

REGO; GO:0016491; F:oxidoreductase activity; IEA.

RGO; GO:0016491; F:oxidoreductase activity; IEA.

RGO; GO:0016491; F:oxidoreductase Con R.

RINTERPO; IPR005475; Transketo Cen R.

REGO; GO:07279; Transketo Cen R.

PF00779; Transketolase C; 1.

Pfam; PF02779; Transketolase C; 1.

Pfam; PF02779; Transketolase C; 1.

Complete proteome; Hypochetical protein.

SEQUENCE 324 AA; 35412 MW; 30C97C19B5724D82 CRC64;
ILT 84
054 LEGPA
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25-OCT-2004 (
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Q5WWI6;
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25-OCT-2004 (TrEMBLrel. 28, Last annotation upd
25-OCT-2004 (TrEMBLrel. 28, Last annotation upd
Hypothetical protein.
OrderedLocusNames=lp11467;
Legionella pneumophila (strain Lens).
Bacteria; Proteobacteria; Gammaproteobacteria;
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NCBI_TaxID=297245;
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RY PLANEd=15448271; DOI=10.1126/science.1099776;

RA ABAMANI G., Hill K., Nuara J., Feder M., Rineer J., Greenberg J.J.,

RA ABAMANI G., Hill K., Nuara J., Feder M., Rineer J., Greenberg J.J.,

RA ABAMANI G., Hill K., Nuara J., Feder M., Rineer J., Greenberg J.J.,

RA Steshenko V., Park S.H., Zhao B., Teplitskaya E., Edwards J.R.,

RA Steshenko V., Park S.H., Zhao B., Teplitskaya E., Edwards J.R.,

RA Kim D.H., Geringer-Sameth A., Goldsberry C., Morozov P., Fischer S.G.,

RA Kim D.H., Geringer-Sameth A., Goldsberry C., Morozov P., Fischer S.G.,

RA Kim D.H., Geringer-Sameth A., Chou I.-C., Iannuccilli W., Ulz M.E.,

RA Kim D.H., Geringer-Sameth A., Chole P., Cayanis E., De Jong P.J.,

RA J., Kalachikov S., Shuman H.A., Russo J.J.;

RA J.J., Rapolator G., Goldonic Bequence of the accidental pathogen Legionella

RT pneumophila."

RT Pneumophila."

RT Science 305:1966-1968(2004).

RT Science 305:1966-1968(2004).

RR GO, GO:0016491; F:oxidoreductase activity; IEA.

RG, GO:0016491; F:oxidoreductase dehydrogenase (acetyl-transferring. . .; IEB

RG, GO:0016491; F:oxidoreductase  Fyruvate

RG, GO:0016491; Transketo_Cen R.

Pfam; PP02779; Transketo_Len R.

Pfam; PP02779; Transketo_Len R.

RT Science 324 AA; 35426 MW; 30DBFE89A7F0DD82 CRC64;
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S Legionella pneumophila (strain Paris).
C Bacteria; Froteobacteria; Gammaproteobacteria; Legione C Bacteria; Proteobacteria; Gammaproteobacteria; Legione C Legionellaceae; Legionella.
X NCBI_TAXID=297246;
N [1] FORDITE SEQUENCE.
N NUCLEOTIDE SEQUENCE.
N STIGHIT M, Jarraud S., Bouchier C., Vandemesch F., Kur Fichit M, Jarraud S., Bouchier C., Vandemesch F., Kur Etienne J., Glaser P., Buchrieser C.;
N Extractions and high genome plasticity.";
N Nat. Genet. 36:1165-1173(2004).
N Nat. Genet. 36:1165-1173(2004).
N Nat. Genet. 36:1165-1173(2004).
N Nat. Genet. 36:1165-1173(2004).
N Legiolist; lpp1516; -. Genomic_DNA.
R Legiolist; lpp1516; -. Genomic_DNA.
R Legiolist; lpp1516; -. Genomic_DNA.
R GO; GO:0016491; F:oxidoreductase activity; IEA.
R GO; GO:0016491; F:oxidoreductase activity; IEA.
R GO; GO:0016491; F:oxidoreductase activity; IEA.
R GO; GO:0016491; F:oxidoreductase C; 1.
R InterPro, IRROS476; Transketo_Cn.
R InterPro, IRROS476; Transketo_Cn.
R Pfam; PP02780; Transketo_Cn.
R Ffam; PP02780; Transketo_Can.
Pfam; PP02780; Transketo_Cn.
SEQUENCE 324 AA; 35426 MW; 30DBFE89A7F0DD82 CRC64;
       Query
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25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Pyruvate dehydrogenase E1 beta subunit (EC 1.2.4.1).
OrderedLocusNames=lpg1559;
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ATCC 33152).
Bacteria; Proteobacteria; G.
Legionellaceae; Legionella.
NCBI_TaxID=272624;
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AN (1)

RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

RX PUMMed=15229592; DOI=10.1038/nature02579;

RX Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S.,

RA Dujon B., Sherman D., Fischer G., Durrens P., Casaregola S.,

RA Lafontaine I., de Montigny J., Marck C., Neuveglise C., Talla B.,

RA Lafontaine I., de Montigny J., Marck C., Neuveglise C., Talla B.,

RA Barray S., Blanchin S., Beckerich J.-M., Beyne E., Blaykasten C.,

RA Boisrame A., Boyer J., Cattolico L., Confanioleri F., de Daruvar A.,

RA Despons L., Fabre E., Fairhead C., Ferry-Dumazet H., Groppi A.,

RA Hantraye F., Hennequin C., Jauniaux N., Joyet P., Kachouri R.,

RA Kerrest A., Koszul R., Lemaire M., Lesur I., Ma L., Muller H.,

RA Nicaud J.-M., Nikolski M., Oztas S., Ozier-Kalogeropoulos O.,

RA Pellerz S., Potier S., Richard G.-F., Straub M.-L., Suleau A.,

RA Swennen D., Tekaia F., Wesolowski-Louvel M., Westhof E., Wirth B.,

Paniou-Meyer M., Zivanovic Y., Bolotin-Fukuhara M., Thierry A.,

Paniou-Meyer M., Zivanovic Y., Bolotin-Fukuhara M., Thierry A.,
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Q6EX79;
25-OCT-2004 (
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Yarrowia lipolytica (Candida lipolytica).
Eukaryota; Fungi; Ascomycota; Saccharomycotina;
Saccharomycetales; Dipodascaceae; Yarrowia.
Submitted [2]
                       STRAIN=Indian D;
Garg I., Spetz C., Khurana S., Mukherjee K., Singh M., Valkonen
"Characterization of potato virus Y isolates from India.";
Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases.
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25-OCT-2004 (TrEMBLrel.
25-OCT-2004 (TrEMBLrel.
Polyprotein (Fragment).
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Nature 430:35-44(2004).
EMBL; CR382128; CAG83083.1; -;
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25-OCT-2004 (TrEMBLrel. 28, Last
25-OCT-2004 (TrEMBLrel. 28, Last
Yarrowia lipolytica chromosome B
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Pred. No. 1.1e+02;
5; Mismatches 4;
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GO:0019028; C:viral capsid;
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NCBI TaxID=1773;

N NCBI TaxID=1773;

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01-MAY-1997 (TrEMBLrel. 24, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
PROBABLE CONSERVED TRANSMEMBRANE PROTEIN.
0rderedLocusNames=Rv3277;
Mycobacterium tuberculosis.
0rderedLocusNames=Rv3277;
Mycobacteria, Actinobacteria, Actinobacteridae; Actinomycetales;
0rynebacterines, Mycobacteriaceae; Mycobacterium;
0rynebacterium tuberculosis complex.
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Mycobacterium tuberculosis.
Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae; Mycobacteriaceae; Mycobacterium;
Mycobacterium tuberculosis complex.
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Q9EAB7 9POTV

Q9EAB7 9POTV

ID Q9EAB7, 9POTV PRELIMINARY; PF

AC Q9EAB7,

DT 01-MAR-2001 (TrEMBLrel. 16, Creat

DT 01-MAR-2001 (TrEMBLrel. 25, Last

DT 01-OCT-2003 (TrEMBLrel. 25, Last

DE POLYPYOTESIN (Fragment).

OC VIruses; seRNA positive-strand vi

OC VIruses; seRNA positive-strand vi

OC POTYVITUS.

OX NCBI_TaxID=12216;

RN (11)

RN UCLEOTIDE SEQUENCE.

RP STRAIN=0;

RA BOONDAM N., Walsh K., Hims M., NC
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01-OCT-2003 (TrEMBLrel. 25, Created)
01-OCT-2003 (TrEMBLrel. 25, Last seq 01-MAR-2004 (TrEMBLrel. 26, Last ann PROBABLE CONSERVED TRANSMEMBRANE PRO OrderedLocusNames=Mb3305;
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InterPro; IPR007267; GtrA.
Pfam; PF04138; GtrA; 1.
Complete proteome; Transmemb
SEQUENCE 272 AA; 30078 MW
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STRAIN=AF2122/97;
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MEDLINE-2279107; PubMed=12788972; DOI=10.1073/pnas.1130426100;
A Garnier T., Biglmeier K., Camus J.-C., Medina N., Mansoor H.,
A Pryor M., Duthoy S., Grondin S., Lacroix C., Monsempe C., Simon S.,
A Harris B., Atkin R., Doggett J., Mayes R., Keating L., Wheeler P.R.
Parkhill J., Barrell B.G., Cole S.T., Gordon S.V., Hewinson R.G.;
"The complete genome sequence of Mycobacterium bovis.";

Proc. Natl. Acad. Sci. U.S.A. 100.7877-7882(2003).

E Proc. Natl. Acad. Sci. U.S.A. 100.7877-7882(2003).

REMBL, BE248345; CAD95397.1; -; Genomic_DNA.

RGO; GO:0016021; C:integral to membrane; IEA.
RGO; GO:0006810; P:transport; IEA.
RGO; GO:0006810; P:transport; IEA.
RGO; GO:0006810; P:transport; IEA.
RGO; GO:0006810; P:transmembrane.

MY Complete protecome; Transmembrane.

MY SEQUENCE 272 AA; 30104 MW; EZE597B96A0AB081 CRC64;
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Bacteria; Actinobacteria; Actinobacteridae; Actinomycetales;
Corynebacterineae, Mycobacteriaceae; Mycobacterium;
Mycobacterium tuberculosis complex.
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30078 MW; F07597B96A0AB081 CRC64
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Pred. No. 33;
2; Mismatches
viruses,
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DNA stage;
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                                                                                                                                                                                                                                                                                                                                                                                            Length 272;
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  Potyviridae;
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Simon
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Barker

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RESULT 94
QPEAD1 9POTV
ID QPEAD1;
OPEAD1;
OT 01-MAR-2
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QJEAD1;
QJ-MAR-2001 ('01-MAR-2001 ('01-OCT-2003 ('Polyprotein (Potato virus
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B8 9POTV
Q9EAB8 9POTV 1
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                                                                                                                                                                                                                                       Pfam; PFUU'b'; FUU'B'; Polyprotein.
Capsid protein; Polyprotein.
23
                                                                                                                                                                                                                                                                                                                   Boonham N., Walsh K., Hims M., North J., Barker I.; "Sequence comparisons within the PVY coat protein highlight a group of recombinant isolates (PYNVIN) associated with potato necrotic ringspot disease (PTNRD)."; Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                             GO; GO:0019028; C:viral capsid; IEA InterPro; IPR001592; Poty_coat. Pfam; PF00767; Poty_coat; 1.
                                                                                                                                                                                                                                                                                             EMBL; AJ390305; CAC05617.1; PIR; A60924; A60924.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAR-2001
01-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Capsid protein; Polyprotein. CHAIN <1 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GO; GO:0019028; C:viral capsid; IEA InterPro; IPR001592; Poty_coat. Pfam; PF00767; Poty_coat; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 group of recombinant isolates (PVXIVI) associanecrotic ringspot disease (PVXIVI) associant submitted (NOV-1999) to the EMBL/GenBank/DDBJ EMBL; AJ390306; CAC05618.1; -; Genomic_RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                     Potyvirus
                                                                                                                                                                                                                                                                                                                                                                                                                              Viruses; ssRNA positive-strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2001
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                                                                                                                                                                                                                                                                                                                                                                                       NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID=12216;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Potato virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polyprotein (Fragment).
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01 (TrEMBLrel. 16, 1
13 (TrEMBLrel. 25, L
n (Fragment).
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                                                                  PRELIMINARY;
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                      Last sequence update)
Last annotation update)
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                                            Created)
                                                                                                                                                              Score 52; DB Pred. No. 35; 1; Mismatches
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                                                                                                                      ANDTIDAGGSSK
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Pred. No.
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                                                                                                                                                                                                                                                                                                         Genomic
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                                                                                                                                                                                                                                                                                                                                          tuber
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Q9U5K4_SPOLT
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Best Local S
Matches 16
                         Query
Best I
  Matches
                                                                         GO; GO:0045735; F:nutrient reservoir ac
GO; GO:0045735; F:nutrient reservoir ac
GO; GO:0005344; F:oxygen transporter ac
GO; GO:0006810; P:transport; IEA.
GO; GO:0006810; P:transport; IEA.
InterPro; IPR005203; hemocyanin_C.
InterPro; IPR005203; hemocyanin_N.
Pfam; PF03723; Hemocyanin_M; 1.
Pfam; PF03723; Hemocyanin_M; 1.
Pfam; PF00372; Hemocyanin_N; 1.
PFANTS; PR00187; HAEMOCYANIN_1.
PROSITE; PS00209; HEMOCYANIN_1; UNKNOW
PROSITE; PS00210; HEMOCYANIN_2; 1.
SEQUENCE 698 AA; 84112 MW; 5F0C17A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q9U5K4_SPOLT PRELIMINARY,
Q9U5K4;
01-MAY-2000 (TIEMBLICEL. 1
01-MAY-2000 (TIEMBLICEL. 1
01-MAR-2004 (TIEMBLICEL. 2
                                                                                                                                                                                                                                                                                                                                                  мВL; AJ249471; CAB55605.1; -; mRNA.
HSSP; P04253; 1LLA.
GO; GO:0045716.
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                  NUCLEOTIDE SEQUENCE.
TISSUE=Fat body;
Zheng Y., Yoshiga T., Tojo S.;
Zheng Y., Yoshiga T., Tojo S.;
"cDNA cloning and deduced amino acid sequences of three storage proteins in the common cutworm, Spodoptera litura.";
Appl. Entomol. Zool. (Jpn.) 35:31-39(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Spodoptera litura (Common cutworm).
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia; Noctuoidea;
Noctuidae; Amphipyrinae; Spodoptera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Neoptera; Endopterygota;
Noctuidae; Amphipyrinae;
NCBI_TaxID=69820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arylphorin subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GO; GO:0019028; C:viral capsid; InterPro; IPRO01592; Poty coat. Pfam; PF00767; Poty coat; 1. Capsid protein; Polyprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  necrotic ringspot disease (PTNRD).";
Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ390292; CAC05604.1; -; Genomic_RNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Boonham N., Walsh K., Hims M., North J., Barker I. "Sequence comparisons within the PVY coat protein group of recombinant isolates (PVYNTN) associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Potyvirus.
NCBI_TaxID=12216;
[1]
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
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                         Local
                                           Match
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Similarity
10; Conserv
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  Conservative
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                    32.1%;
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                       Score 52; DB Pred. No. 93;
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Pred. No.
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                                                                                       5F0C17A20A4F757A CRC64;
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  Mismatches
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annotation
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  12;
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with potat
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potato
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B

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ANYSNSLSYPNKEQKLSYFTEDIGLN

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Barker - B. Blant:

Submitted (COT-2003) to the EMBL/GenBank/
Submitted (COT-2003);

Submitted (COT-2003);

EMBL; AJ585196; CAE51191.1; -; Genomic_RX
GO; GO:0005524; F:ATP-dependent helicase
GO; GO:0005524; F:ATP-dependent helicase
GO; GO:00005524; F:ATP-dependent helicase
GO; GO:00004197; F:CYSteine-type endopepti
GO; GO:0003723; F:RNA-binding; IEA.
GO; GO:0003526; F:RNA-directed RNA polyme
GO; GO:00006508; P:Proteolysis and peptidc
GO; GO:00006350; P:transcription; IEA.
GO; GO:0006350; P:transcription; IEA.
GO; GO:0006350; P:transcription; IEA.
GO; GO:00019079; P:viral genome replicatic
InterPro; IPR001194; DEAD./DEAH.
InterPro; IPR001194; DEAD./DEAH.
InterPro; IPR001701; Peptidase_C4.
InterPro; IPR001701; Peptidase_C4.
InterPro; IPR001705; RNA_DOLDS_PS.
InterPro; IPR001205; RNA_DOLDS_PS.
INTERPRO; RNAPE_I; I.
Pfam; PF00680; RN
Capsid p
CHAIN
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Q5ZPN7;
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25-OCT-2004 (7
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Barker B., McGeachy K.D.;
Barker B., McGeachy K.D.;
"Comparison of the genome sequences of biological properties.";
Submitted (OCT-2004) to the EMBL/GenBar
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Potato virus Y.
Viruses; ssRNA positive-strand viruses, no DNA stage; Potyviridae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mitted (OCT-2003) to the EMBL/GenBank/DDBJ databases.

Li; AJ585196; CAE51191.1; -; Genomic RNA.

GO:0019028; C:viral capsid; IEA.
GO:0008524; F:ATP binding; IEA.
GO:0008526; F:ATP binding; IEA.
GO:0008197; F:cysteine-type endopeptidase activity; IEA.
GO:0003197; F:RNA binding; IEA.
GO:0003723; F:RNA binding; IEA.
GO:0003968; F:RNA-directed RNA polymerase activity; IEA.
GO:0003969; P:viranscription; IEA.
GO:0006508; P:proteolysis and peptidolysis; IEA.
GO:0006508; P:viranscription; IEA.
GO:0006509; P:viranscription; IEA.
GO:0006509; P:viranscription; IEA.
                                                                                                                                                            PP006b.,
S; PR00966; NAL.;
I; SM00487; DEXDC; 1.
CT; SM00490; HELICC; 1.
CT; SM00490; THIOREDOXIN;
CTEF, PS00194; THIOREDOXIN;
CTEF, PS00194; Polyprotein.
275
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  protein.
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RESULTATION OF THE PROPERTY OF
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Matches 16
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(R3 MOUSE OBBYR3 MOUSE OBBYR3; OBSYR3; O1-MAR-2003 O1-MAR-2003 O1-UN-2003
NUCLEOTIDE SEQUENCE.
STRAIN-C57BL/6J; TISSUB=Hypothalamus;
STRAIN-C57BL/6J; TISSUB=Hypothalamus;
MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
Carninc1 P., Shibata Y., Hayatsu N., Sugahara Y., Shibata
Carninc1 P., Shibata Y., Muramatsu M., Hayashizaki Y.;
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
Mus musculus adult male hypothalamus CDNA, RIKEN full-length enriched
library, clone.A230045Dl0 product hypothatical phosphatidylinositol-
specific phospholipase C, X domain containing protein, full insert
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STRAIN=C57BL/6J; TISSUB=Hypothalamus;
STRAIN=C57BL/6J; TISSUB=Hypothalamus;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P, Hayashizaki Y;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
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Name=Plcxd3; Synonyms=B130016010Rik;
Nus musculus (Mouse).
Mus musculus (Mouse).
Craniata
Bukaryota; Metazoa; Chordata; Craniata
Mammalia; Butheria; Buarchontoglires;
Murcidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE.
STRAIR-SCYBL/6J; TISSUE=Hypothalamus;
The FANTOM Consortium,
the RIKEN Genome Exploration Research Group
"Analysis of the mouse transcriptome based of 60,770 full-length cDNAs.";
Nature 420:563-573(2002).
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Hayashizaki Y.;
"Functional anno
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Pred. No. 4.7e+02;
L; Mismatches 5
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Q63HM9_HUMAN
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Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W.,
Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
A Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
A Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,
A Nishi K., Nomura K., Numazaki R., Ohno M., Ohasato N., Okazaki Y.,
A Nishi K., Nomura K., Numazaki R., Ohno M., Ohasato Y.,
A Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.
Tagawa A., Takahashi F., Takaku-Aahira S., Takeda Y., Tanaka T.,
A Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.,
Submitted (JUL-2001) to the EMEL/GenBank/DDBJ databases.
B EMEL, AKO38575; BAC30052.1; -, mRNA.
B Ensembl; ENSMUSG0000049148; Mus musculus.
B MGI; MGI:2442605; B130016010Rik.
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MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600;

Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,

Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Hazada A.,

Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,

Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watshiki M.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Yoneda Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

"RIKEN integrated sequence analysis (RISA) system-384-format

sequencing pipeline with 384 multicapillary sequencer.";

Genome Res. 10:1757-1771(2000).
HGNC; HGNC:31822; PLCXD3
GO; GO:0004629; F:phosph
GO; GO:0007242; P:intrac
                                                                                                             The German cDNA Consortium;
Bloecker H., Boecher M., Brandt P., Mewes H.W.
Osanger A., Fobo G., Han M., Wiemann S.;
Submitted (SEP-2004) to the BMBL/GenBank/DDBJ
EMBL; BX648329; CAH56150.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation updat
Hypothetical protein DKFZp686J13163,
Name=PLCXD3; Synonyms=DKFZp686J13163;
                                                                                       Ensembl; ENSG00000182836; Homo sapiens
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE.
TISSUE=Uterus endothel;
                                                                                                                                                                                                                                                                                                                                                                  NCBI_TaxID=9606;
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GO:0004629; F:phospholipase C activity; GO:0007242; P:intracellular signaling ca
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199 AA; 2
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ni./6J; TISSUE=Hypothalamus;
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nilarity 40.7%;
Conservative
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Pred. No. 28;
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                                                                                                                                                                                                               Mewes H.W.,
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rimates; Catarrhini; Hominidae;
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STRAIN=VSB3 / ATCC 700802;
MEDLINE=22550857; PubMed=12663927; DOI=10.1126/science.1080613;
Paulsen I.T., Banerjei L., Myers G.S.A., Nelson K.E., Seshadri R.,
Paulsen I.T., Banerjei L., Myers G.S.A., Gill S.R., Heidelberg J.F.,
Read T.D., Fouts D.E., Eisen J.A., Gill S.R., Heidelberg J.F.,
Tettelin H., Dodson R.J., Umayam L.A., Brinkac L.M., Beanan M.J.,
Tettelin H., Dodson R.J., Umayam I.A., Kolonay J.F., Madupu R.,
Daugherty S.C., DeBoy R.T., Durkin S.A., Kolonay J.F., Madupu R.,
Nelson W.C., Vamathevan J.J., Tran B., Upton J., Hansen T., Shetty
Nelson W.C., Vamathevan J.J., Radune D., Ketchum K.A., Dougherty B.A
                                                                                                                                                                                                                            InterPro; IPR005476; Transketo_C. R. InterPro; IPR005475; Transketo_Cen R. InterPro; IPR009014; Transketo_Clike Pfam; PF02780; Transketolase_C; 1. Pfam; PF02779; Transket_pyr; 1.
                                                                                                                                                                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ward D.E., Ross R.P., van der Weijden C.C., Snoep J.L., Claibo: "Catabolism of branched-chain alpha-keto acids in Enterococcus faecalis: the bkd gene cluster, enzymes, and metabolic route."
J. Bacteriol. 181:5433-5442(1999).
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01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
TPP-dependent branched-chain alpha-keto acid dehydrogesubunit (Branched-chain alpha-keto acid dehydrogenase,
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Q9RPS4; Q7C3I
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Hypothetical prote
SEQUENCE 321 AA;
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SMART; SM00148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Science 299:2071-2074(2003).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Role of mobile DNA in the evolution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=99395054; PubMed=10464218;
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